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A profile of private liberal arts colleges as a group was constructed from a study of approximately 690 such colleges in the U.S. This study has six chapters, including an introduction that presents a cursory view of some major aspects of the condition of higher education in general. The next four chapters examine trends in institutional and enrollment growth, changes in students and the impact of these changes upon curriculum, the status of faculty and staff, and finances. The final chapter, recapitulates the major trends discussed in the preceding chapters. The text contains 26 tables and the appendix provides 17 additional tables. (Author/SPG)

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A PROFILE OF PRIVATE LIBERAL ARTS COLLEGES

by
Bruce M. Carnes
Bureau of Higher and Continuing Education
Office of Education

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
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Office of Education
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FOREWORD

Many recent studies of the condition of higher education in the Nation have complained of the paucity or untimeliness of the data available for analysis. Statistics are aggregated usually only in terms of the public and private sectors, and analysis of groups of institutions within these two broad categories is difficult, if not impossible. Further, differences from year to year in definitions and data collection practices compound the problem of measuring and defining trends for institutional groupings. Thus, the selection of a particular set of institutions for study over a predetermined period of time is by circumstance limited in terms of specificity and completeness.

With frank acknowledgment of these distinct limitations, this study examines the trends that are discernible in the aggregate data available from private liberal arts colleges. The study does not propose to describe institutional conditions at a particular moment in history. Rather, it attempts to construct a profile of private liberal arts colleges as a group, a profile in the process of change through time and the force of new conditions and circumstances. The universe to be studied is the approximately 690 private liberal arts colleges in the Nation and the important contribution they make by increasing the educational options available to students.

Much has been written in recent years relative to the value of and need for diversity among higher education institutions. In this context, the term "diversity" usually is intended to embrace not only differences between institutions in terms of the method by which they obtain financial support, but differences in total institutional enrollments, differences in class size, differences in curriculums offered, and differences in social and moral values taught. As the cost of college attendance has risen, and as enrollment levels have stabilized or declined, institutional differences have become accentuated in the minds of prospective students and their parents. Private liberal arts colleges and their distinctive characteristics contribute significantly to the diversity of our higher education system and merit special study.

It is anticipated that this publication will provide educators, legislators, and concerned citizens with a convenient, yet thorough, compilation of the extant information regarding these important institutions. The major source of data is the Higher Education General Information Survey; however, the study also makes use of data from numerous private organizations and independent scholars.

It is hoped that this effort will help to establish a foundation for further research and study of this segment of higher education.

William C. Gescheider,
Chief, Planning Staff,
Bureau of Higher and Continuing Education.

December 1977

PREFACE

Much consternation exists in education circles and elsewhere about the status of private liberal arts colleges. Almost daily, it seems, an article or a book appears that either decries the imminent collapse of these colleges or heatedly states the contrary. A purpose of this study is to clear the air and help to take the edge off this debate.

This study is based on aggregate data focusing mainly on the last decade. It has six chapters, including an introduction which presents a cursory view of some major aspects of the condition of higher education in general; that is, it establishes a context in which to view the condition of private liberal arts colleges. The second chapter begins the discussion proper by examining trends in institutional and enrollment growth. The third chapter focuses on changes in students and the impact of those changes upon curriculum. Chapter four examines the status of faculty and staff. The fifth chapter deals with finances and, in doing so, attempts to avoid pejorative terms such as "financial exigency" and "fiscal crisis." These terms would be inappropriate for this study because they have been construed in an apparently infinite variety of ways and consequently have little descriptive function. The final chapter, the conclusion, serves mainly to recapitulate the major trends discussed in the preceding chapters.

This study is concerned with a universe that varies in size from year to year but consists of roughly 690 colleges. It relies heavily upon the Higher Education General Information Survey (HEGIS) for statistical information. It also uses data from other sources, both public and private, such as the American Association of University Professors, the Association of American Colleges, and the American Council on Education. One conclusion of this study is that there is a great need for more thorough data gathering: there is a lack of data for private liberal arts colleges and insufficient information on faculty, staff, and student characteristics.

The data are presented, wherever possible, according to the system of classifying institutions used by the Carnegie Commission on Higher Education. Under this system, there are five classes: Doctoral-Granting Institutions; Comprehensive Universities and Colleges; Liberal Arts Colleges; Two-Year Colleges and Institutes; and Professional Schools and Other Specialized Institutions. Thus, the study focuses on the private institutions in Class 3, Liberal Arts I and II colleges.[1] Unless otherwise specified, the terms Liberal Arts I and Liberal Arts II refer to private institutions.

The data are empirical and consequently tell only as much about the condition of private liberal arts colleges as a physical examination tells about the condition of a human being. Both are incomplete to the extent that they neglect subjective matters or equate them with objective measures. Any final assessment of the condition of private liberal arts colleges must deal with such intangibles as quality, intellectual curiosity, and vitality, and academic freedom and integrity. It is hoped that this study

fulfills that obligation better than many others do; and from time to time it reminds the reader of the need for taking these intangibles into account. It is hoped that one result of this study will be to alert the public to the importance of these matters.

Many people have provided invaluable assistance in various phases of this study. Special thanks should be given to Sharon G. Yates of the Bureau of Higher and Continuing Education (OE) for her diligent competence in gathering and preparing the data. James W. Moore, also of the Bureau, gave valuable support in the early phases of the project. In addition, Dr. Joseph P. Miller of John Carroll University contributed substantially to the development of these materials during his stay in Washington as a participant in the Presidential Executive Interchange Program. Jean Sclater and Mary Brown, of the Bureau, and Cathy Henderson and Elaine El-Khawas, of the American Council on Education, also provided assistance in data collection. W. Vance Grant and C. George Lind of the National Center for Education Statistics provided much help in reviewing the data and parts of the text. William A. Shoemaker of the Council for the Advancement of Small Colleges perused various portions of the text and provided many useful suggestions. A particular debt is owed Margaret Duell of this Bureau for laboring arduously over the task of typing the text and charts.

There are others, too numerous to name, whose suggestions, patience, and sympathy have helped throughout the study. To them, too, a special thanks.

NOTE

1. The Carnegie Commission defines Liberal Arts I colleges as public and private institutions which "scored 5 or above on Astin's selectivity index [based on NMSQT scores for 1964] or . . . were included among the 200 leading baccalaureate granting institutions in terms of numbers of their graduates receiving Ph. D.'s at 40 leading doctoral-granting institutions from 1920 to 1966. . . ." Liberal Arts II colleges "include all the liberal arts colleges that did not meet our criteria for inclusion in the first group. . . ." A *Classification of Institutions of Higher Education.* Berkeley: The Carnegie Commission on Higher Education, 1973. Pp. 3–4.

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CHAPTER I

Introduction; Past Expansion and Future Limitation in the Growth of Higher Education

The history of American higher education is largely a record of continuous, rapid growth in the number and size of institutions, the number of students who attend them, the number of people who work in them, and the size of their budgets. More recently, though, the expansion rate has begun to slow in some sectors, and some trends suggest that the future may be characterized by declining enrollments and their unfortunate consequences. But throughout most of this century, higher education has grown virtually without restraint. It has become big business. For example, between 1965–66 and 1975–76, total current fund revenues at public and private institutions combined (including 2-year colleges) rose from $12.8 billion to $39.6 billion, and expenditures rose concomitantly from $12.6 billion to $38.9 billion. At the same time, year-end market values of endowments at public and private institutions combined rose to $15.4 billion.

This enormous expansion in the enterprise has been accompanied, of course, by increasing numbers of staff. In 1959–60, for example, institutions of higher education employed 383,000 faculty and other professional staff, 54.8 percent of whom worked in public institutions. By 1972–73, there were roughly 887,000 total faculty and other professionals employed in all institutions. By this time, the proportion employed in the public sector had jumped to 70 percent of the total.[1] By 1975–76, there were more than 377,000 full-time instructional faculty alone in higher education.[2]

As higher education became a large financial enterprise, it also became more expensive. In 1965–66, for example, total charges to students at public universities averaged $1,105, while at other public 4-year colleges, they were $902. In 1976–77, these charges had jumped to an estimated $2,063 at public universities and $1,843 at other public 4-year colleges. In the private sector, the increases are even more startling. Total charges to students at private universities averaged $2,316 in 1965–66 and soared to $4,573 in 1976–77. In other private 4-year colleges, the charges rose from $1,897 to $3,723.[3] Such increases and the price differentials between the public and private sectors obviously give the public sector a competitive edge.

During about the last 45 years, the growth of higher education has been remarkably and consistently dynamic. In terms of the total number of institutions, for example, the higher education community (including 2-year colleges) has more than doubled (see table 1). During this period, the number of institutions grew by an average of 36 each year. Since 1973–74, though, this rate has fallen off sharply, so that lately the number of schools has increased by an average of only 19 annually. This decline in the growth rate is even more striking when one realizes that during the depression the number of institutions increased by 26 per year.

The most spectacular growth in the numbers of institutions has occurred in the public sector. Since 1931–32, the number of public institutions has increased by an average of 21 each year, but lately that growth rate has slowed somewhat. During the depression the public sector grew by an average of 7 new schools each year. (A part of this growth is caused by the practice of counting branch campuses as individual institutions after 1964–65. Notwithstanding this practice, the growth is exceptional.)

The growth of the private sector has been only slightly less spectacular. Since

TABLE 1.—Number of Institutions of Higher Education, by Control: United States and Outlying Areas, 1931–32 to 1976–77

Academic year	Total	Control of institution			
		Public		Private	
		Number	Percent	Number	Percent
1931–32	1,460	544	37.3	916	62.7
1935–36	1,628	577	35.4	1,051	64.6
1941–42	1,720	616	35.8	1,104	64.2
1945–46	1,768	624	35.3	1,144	64.7
1949–50	1,858	640	34.4	1,218	65.6
1954–55	1,855	652	35.1	1,203	64.9
1959–60	2,028	703	34.7	1,325	65.3
1964–65	2,207	790	35.8	1,417	64.2
1969–70[1]	2,836	1,312	46.3	1,524	53.7
1970–71[1]	2,855	1,335	46.8	1,520	53.2
1971–72[1]	2,902	1,381	47.6	1,521	52.4
1972–73[1]	2,951	1,414	47.9	1,537	52.1
1973–74[1]	3,018	1,445	47.8	1,573	52.2
1974–75[1]	3,038	1,453	47.8	1,585	52.2
1975–76[1]	3,055	1,454	47.6	1,601	52.4
1976–77[1]	3,075	1,467	47.7	1,608	52.3

[1] Number of institutions of higher education include branch campuses.

NOTE: Due to rounding, percentages may not add to 100.0%.

SOURCES: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, *Higher Education Education Directory, 1970–71—1976–77*. U.S. Department of Health, Education, and Welfare, Office of Education, *Biennial Survey of Education, 1946*.

1931–32, the number of private institutions has increased by an average of 15 a year. The data show, though, that this growth has been erratic, especially since the beginning of this decade, and has begun to slow. Thus, between 1969–70 and 1976–77, the growth rate had declined to 12 per year, while during the depression it was 19 per year. In other words, as measured by numbers of institutions, the growth of the public sector has been more striking than that of the private.

A more dramatic indication of the relatively greater growth of the public sector is revealed in the proportions of public to private institutions: in 1949–50, private schools outnumbered public schools by almost 2:1; since 1969–70, this proportion has shrunk to nearly 1:1. In terms of relative growth, the public sector has expanded by 170 percent in the last 45 years, while the private sector has grown by only 76 percent.

The greater growth of the public sector vis-á-vis the private is in sizable measure due to the rapid emergence of 2-year institutions. Since 1960–61, the number of public 2-year institutions has more than doubled, while the number of private 2-year institutions has actually declined by one-fourth (see table 2). The peak growth period for public 2-year institutions was between 1965 and 1970, when the number of schools increased by an average of 70 per year, or better than 1 per week. But the number of private 2-year institutions was declining during the 1960's by an average of 3 per year. Thus, as of 1976–77, public 2-year institutions outnumbered private ones by more than 5 to 1 and represented 84 percent of the entire sector.

The expansion of this sector was stimulated by a number of causes. For example, there has been during the last 15 years increasing demand for vocational education, and many 2-year institutions specialize in such technical and career-oriented training. Moreover, numerous workers desire to sharpen skills learned earlier or to acquire new ones and look to 2-year institutions to help them fulfill these needs. In addition, the growing emphasis on increasing accessibility to postsecondary education has prompted numerous governmental authorities to make such education more geographically available, especially to commuter

TABLE 2.—Number of 2-Year Institutions of Higher Education, by Control: United States, 1960–61 to 1976–77

Academic year	Total	Control	
		Public	Private
1960–61	678	405	273
1965–66	771	503	268
1970–71	1,091	847	244
1975–76	1,230	1,014	216
1976–77	1,233	1,030	203

SOURCE: *American Association of Junior Colleges Annual Directory, 1976, 1977*.

students. Thus, 2-year institutions have sprung up all over the Nation to help eliminate extreme distance and travel time as impediments to getting some form of post-secondary education.

The growing dominance of the public sector is highlighted by the enrollment growth in 2-year public institutions. Between 1960–61 and 1976–77, enrollments grew by almost 600 percent to better than 3.9 million students (see table 3).

Notwithstanding these unequal patterns of growth, though, total private institutions in 1976–77 still outnumbered total public institutions. On the other hand, enrollment in the public sector was more than three times greater than in the private sector in that year. Enrollment in all institutions (including 2-year institutions) has grown in the last quarter century by more than 4 times to a total of 9.7 million students in 1975 (see table 4). In 1950, this enrollment was evenly divided between public and private institutions. Thus, since there were only half as many public schools as there were private ones, public schools were generally twice as large as private ones. By 1975, public institutions enrolled three-fourths of all of the students in college and were roughly 3 times as large as private schools. The disparities in enrollment growth rates in the public and private sectors underscore these observations. Enrollment in the public sector has grown during the last quarter century by 552 percent, while in the private sector it has grown by only 102 percent. Thus, in terms of enrollment, as in terms of numbers of institutions, both sectors expanded significantly, but the public sector grew by 3 times as many students as did the private. The rate of growth of the public sector was 5½ times greater than that of the private.

In addition to large increases in the number of institutions and in the number of students going to college, there is a parallel trend, inferred above, in both the public and private sectors toward larger individual institutions. Table 5 (below) shows, for example, that in the public sector the number of very small colleges decreased between 1967 and 1975—those with fewer than 500 students declined by 46 percent. In the 500–2,499 enrollment range (the range into which most private liberal arts colleges fall), the number of public institutions rose by nearly 45 percent. Within both the 1,000–2,499 enrollment range and the 2,500–9,999 range, the increases were even greater, about 72 percent each. Within the 10,000–29,999 range, there was a 94 percent in-

Table 3. Enrollment in 2-Year Public Institutions of Higher Education, United States, 1960–61 to 1976–77

Academic year	Enrollment
1960–61	566,224
1965–66	1,152,086
1970–71	2,366,028
1975–76	3,921,542
1976–77	3,939,173

SOURCE: *American Association of Junior Colleges Annual Directory, 1976, 1977*

TABLE 4.—Degree-Credit Enrollment in Institutions of Higher Education, by Control: United States, Fall 1950 to Fall 1975

Fall	Total	Control of institution			
		Public		Private	
		Number	Percent	Number	Percent
1950	2,281,298	1,139,699	50.0	1,141,599	50.0
1955	2,653,034	1,476,282	55.6	1,176,752	44.4
1960	3,582,726	2,115,893	59.1	1,466,833	40.9
1965	5,526,325	3,624,442	65.6	1,901,883	34.4
1970	7,920,149	5,800,089	73.2	2,121,060	26.8
1971	8,116,103	6,013,934	74.1	2,102,169	25.9
1972	8,265,057	6,158,929	74.5	2,106,128	25.5
1973	8,518,150	6,388,619	75.0	2,129,531	25.0
1974	9,023,446	6,838,324	75.8	2,185,122	24.2
1975	9,731,431	7,425,772	76.3	2,305,659	23.7

NOTE. Beginning in 1960, data are for 50 States and the District of Columbia, data for earlier years are for 48 States and the District of Columbia. Beginning in 1955, enrollment figures include extension students.

SOURCE. U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, *Digest of Education Statistics, 1975.*

crease, and within the range above 30,000, there was a 13 percent increase between 1968 and 1975. The greatest growth occurred in the 10,000–19,999 range level, where the number of institutions rose by 123 percent (see table 5).

In the private sector, the same phenomenon occurred, with one or two exceptions. The number of very small private institutions (those enrolling fewer than 500 students) increased by 9 percent, while their counterparts in the public sector declined dramatically. Within the 500–2,499 range (where most private liberal arts colleges fall), the number of private institutions rose by 6 percent. Within the 2,500–9,999 range, the number of institutions rose by 36 percent, not far from the rate of increase within that range in the public sector. Within the 10,000–29,999 range, the number stayed almost unchanged between 1968 and 1975, while the number of very large private institutions, that is, those with more than 30,000 students, declined from 2 to 1. The number of private institutions with between 10,000 and 19,999 students also remained essentially unchanged, though that was the fastest growing level in the public sector.

Three important *caveats* are in order here. First, it should be remembered that these calculations concerning the number of institutions by enrollment level are not to be taken as indicating that there was a decline in the total number of institutions. Rather, the figures suggest that smaller institutions were growing and migrating to the next range upward, not closing.

Second, it is specious to equate growth with prosperity. Thus, it does not follow that, because the public sector has expanded much more rapidly than the private, it is therefore the healthier sector.

Third, and related to the previous point, the rates of growth of these two sectors indicate much more than the level of the demand there is for these schools. They also reflect the decisions of numerous bodies of governance. The expansion of the public sector reflects to a great degree the notions of State legislatures about satisfying the perceived needs of their expanding populations. Moreover, since it is commonly believed that the larger the institution, within limits at least, the more efficiently it makes use of its resources, State legislatures might very well oppose the preservation of very small colleges, feeling instead that they should either expand or close.

In the private sector, though, the situation is different. Here governing boards may just as likely decide, in order to preserve the identity of the institution and its mission, not to increase enrollment, or to permit it to increase at only a relatively slow rate. Moreover, a private institution has considerably more voice in decisions about expansion than does a public institution, which is often treated by legislatures as a member of a group, rather than an entirely autonomous entity.

A final important trend in assessing the broad context in which to view the condition of private liberal arts colleges is the increase in the proportion of people in the traditional college-age segment of the population who actually go to college. Between 1950 and 1970, the proportion grew dramatically from 14.5 to 32.1 percent of that segment. Since then, the rate of growth of this proportion has fluctuated, though by 1975, 35.2 percent of the traditional college-age population went to college. The period of most rapid increase in this proportion was during the 1960's, when the "war babies" attained college age and when the Vietnam War prompted many to seek college deferments.

From a number of perspectives, this increasing proportion is obviously desirable and encouraging. On the other hand, certain of its other implications are alarming, portending an end to the previous golden years of easy expansion in higher education. One must wonder, for example, just how long the proportion going to college can continue to grow. Moreover, the growth of enrollments in the private sector has not kept pace with the growth of enrollments in the public: the percentage of the college-age population going to private institutions in 1950 was the same as that of students going to public institutions, but after attaining a high of 9.4 percent in 1960, it decreased

TABLE 5.—Number of Institutions of Higher Education, by Control and Size of Enrollment: United States, Fall 1967 to Fall 1975

Enrollment size	1967				1969		1970		1971		1972		1973		1974		1975	
	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private
Under 200	21	270	26	276	20	253	17	250	8	247	10	252	12	268	3	276	6	27
200-499	79	266	70	271	73	296	55	289	61	292	60	307	58	323	46	313	48	31
500-999	148	283	149	408	159	411	155	403	153	385	159	383	157	384	134	391	152	40
1,000-2,499	230	360	274	353	278	340	293	355	305	371	314	366	326	368	334	366	397	38
2,500-4,999	184	85	178	88	196	91	201	92	221	95	233	95	236	100	234	104	286	12
5,000-9,999	147	46	165	46	180	49	187	50	191	51	206	53	208	55	232	51	283	5
10,000-19,999	79	21	97	22	97	17	122	20	131	19	129	20	137	22	146	22	176	2
20,000 or more	46	9	52	8	57	8	59	8	67	9	71	7	76	8	86	10	94	
20,000-29,999			(29)	(6)	(33)	(6)	(31)	(6)	(38)	(8)	(39)	(5)	(40)	(7)	(49)	(9)	(68)	(6
30,000 or more			(23)	(2)	(24)	(2)	(28)	(2)	(29)	(1)	(32)	(2)	(36)	(1)	(36)	(1)	(26)	(2
Total institutions	934	1,440	1,011	1,472	1,060	1,465	1,089	1,467	1,137	1,469	1,182	1,483	1,210	1,528	1,214	1,553	1,442	1,58

NOTE: In the above tabulation a branch campus is not counted as a separate institution but is considered to be a part of the parent institution.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, *Digest of Education Statistics, 1969-1976.*

to 8.1 percent by 1972. (It increased slightly once again in 1975.) Meanwhile, the percentage of the college-age population going to public institutions increased virtually without interruption and accounts for nearly the entire growth of this figure since 1971. Between 1970 and 1975 the college-age population grew by 11.9 percent, but enrollment in private institutions grew by only 8.7 percent, while in public institutions it grew by 22.9 percent (see table 6).

Another cause for concern is the future contraction in size of the traditional college-age population. The great expansion in the numbers and proportion of students going to college occurred during a time when the college-age population itself was steadily increasing (by 75 percent) and thus providing an expanding source of students. But by the year 1990, that source of students will have declined from the 1976 level by 10.7 percent; by the year 2000, there will be a slight increase in the number of 18-24 year olds, but that figure will still be 4.7 percent below the 1976 figure. (These calculations can be made with certainty since what will be the traditional college age segment of the population in the late 1990's was just born.) Indeed, as the previous table indicates, the slowdown in the rate of growth of the traditional group of students has already begun. For the private sector, these trends may be particularly significant, though, as was pointed out above, the enrollment growth in the private sector is not so dramatic as that in the public, in part because many private institutions choose not to grow so much as their public counterparts.

While projections of any kind are difficult to make, especially in higher education enrollments, the trends noted above are concurred in by a number of prominent scholars. For example, Allan M. Cartter and Lewis G. Solmon have argued that "undergraduate enrollments . . . will continue to increase modestly through the early 1980s, declining about 10 percent over the following dozen years, then turning up again modestly in the mid-1990s. No more undergraduates are likely to be enrolled in degree programs in 1995 than in 1975. Although the phrase 'steady state' implies little change in enrollments over the next two decades, the ups and downs within that 20-year period will be anything but steady." The apparent implication of these figures is that, as the traditional college-age population declines, both public and private institutions may encounter increasing difficulty in attracting the number of students they want and may have

TABLE 6.—Degree-Credit Enrollment in Institutions of Higher Education, by Control, Compared With Population Ages 18-24: United States, Fall 1950 to Fall 1975

Year	Population 18-24 years of age [1]	Enrollment total	Number enrolled per 100 persons 18-24 years of age	Enrollment public	Number enrolled per 100 persons 18-24 years of age	Enrollment private	Number enrolled per 100 persons 18-24 years of age
1950	15,779,000	2,281,298	14.5	1,139,699	7.2	1,141,599	7.2
1960	15,578,000	2,582,726	23.0	2,115,893	13.6	1,466,833	9.4
1970	24,687,000	7,920,149	32.1	5,800,089	23.5	2,121,060	8.6
1971	25,778,000	8,116,103	31.5	6,013,934	23.3	2,102,169	8.2
1972	25,915,000	8,265,057	31.9	6,158,929	23.8	2,106,128	8.1
1973	26,398,000	8,518,150	32.3	6,388,619	24.2	2,129,531	8.1
1974	26,915,000	9,023,446	33.5	6,838,324	25.4	2,185,122	8.1
1975	27,623,000	9,731,431	35.2	7,425,772	26.9	2,305,659	8.3

[1] These Bureau of the Census estimates include Armed Forces overseas.

NOTE. Beginning in 1960, data are for 50 States and the District of Columbia, data for earlier years are for 48 States and the District of Columbia. Beginning in 1953, enrollment figures include extension students.

SOURCES. U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, *Digest of Education Statistics*, 1975, p. 79. U.S. Bureau of the Census, *Census of the Population, 1970*, Vol. 1, Characteristics of the Population, Part 1, United States Summary—Section 1. Pp. 1-268. U.S. Bureau of the Census, *Current Population Reports*, Series P-25, No. 614, "Estimates of the Population of the United States, by Age, Sex, and Race: 1970 to 1975." Pp. 11-16.

to attract more students from unconventional population segments, such as older people, housewives, and the like. But Richard Freeman and J. Herbert Holloman, in "The Declining Value of College Going," state that "an enormous movement of adults into higher education would be needed to save the college and university system from the expected fall in student population." They find this event "unlikely." [5] And, as Robert Dorfman and Donald C. Cell point out, the proportion of college age people deciding to enter college depends upon what proportion graduates from high school (this proportion has been increasing) and, second, what proportion is able and willing to go to college (but this proportion has begun to decrease).[6]

The impact of demographics on higher education enrollments is apparently being complemented by an economic one. Obviously, inflation has had a serious effect on many schools and on those who must pay for the consequent tuition increases (more of this in chapter V). In addition, many college graduates appear to be having increasing difficulty in finding work. Freeman writes that the gap between the starting salaries of high school graduates and college graduates has declined from the boom years of the 1960's and probably will not return to the previous high, at least for the foreseeable future. There are, of course, cyclical fluctuations in the demand for graduates. Recent information suggests that there is a resurgence in the demand for engineers, biologists, and mathematicians.[7]

Business-oriented fields will probably suffer the least, while "academic" fields will in all likelihood suffer the most. (It will be seen in chapter II that students are beginning to flee these "academic" majors.) Thus, a college education may cease being the guarantor of social and economic advancement that it once was.[8] As a consequence, one may infer, a number of schools (such as many private liberal arts colleges), which had these goals as their primary but unofficial *raisons d'être*, may find themselves in decreasing demand for increasing numbers of students. On the other hand, value-oriented institutions may not be so adversely affected by economic trends.

In short, there will be a declining pool of traditional-college-age people, many of whom may decide that it is simply not worth it to go to college. And all sectors and segments of the higher education community, not just the private sector, will probably be hard pressed to maintain their enrollment levels, or even to prevent their sharp decline. Thus, while higher education has expanded rapidly in almost every sense, it appears that expansion cannot continue at the present level for much longer, unless colleges find additional and substantial sources of potential new students and then are able to enroll them. It appears that budgets will continue to grow effortlessly. As have other enterprises in our society, higher education in general is beginning to confront the problems of growth limitations. Indeed, these problems have already beset some sectors of the higher education community.

CHAPTER I.—NOTES

1. *Faculty and Other Professional Staff in Institutions of Higher Education, First Term, 1959–60.* Washington. U.S. Department of Health, Education, and Welfare (DHEW), National Center for Education Statistics (NCES), 1963, frontispiece, *Numbers of Employees in Institutions of Higher Education, Fall 1972.* Washington. DHEW/NCES, 1976, p. 1.
2. *Salaries, Tenure, and Fringe Benefits of Full Time Instructional Faculty in Institutions of Higher Education, 1975–76.* Washington: DHEW/NCES, 1977.
3. *Projections of Education Statistics to 1984–85.* Washington: DHEW/NCES, 1977.
4. Allan M. Cartter and Lewis G. Solmon. "Implications for Faculty" in "The Financial State of Higher Education," *Change*, 8, no. 8 (September 1976), p. 38.
5. Richard Freeman and J. Herbert Holloman. "The Declining Value of College Going," *Change*, 7, no. 8 (September 1975), p. 27.
6. Robert Dorfman and Donald C. Cell, "Nearly Keeping Up. Report on the Economic Status of the Profession, 1975–1976," *AAUP Bulletin*, 62, no. 2 (Summer 1976), p. 207.
7. Richard Freeman, *The Overeducated American.* New York. Academic Press, 1976, pp. 184–87.
8. Freeman and Holloman, pp. 27–31.

CHAPTER II

Growth and Decline in Private Liberal Arts Colleges

At this point, the analysis narrows to consider in as much detail as possible one of the smaller segments of the higher education community, the private liberal arts colleges, which appear to be the institutions most severely affected by the problems of declining enrollments and increasing costs. Though these schools constitute about 20 percent of all institutions of higher education, they enroll only about 7 percent of all the students who go to college. But the smallness of enrollment in this sector must not be allowed to detract from its importance. After all, private liberal arts colleges have fulfilled an important role in the lives of a great number of people and in the academic community. But because this universe has relatively small enrollments, it is often extremely hard to study. The available data all too often cannot be manipulated to yield information on these schools, requiring grouping in larger aggregates.

In general, the patterns of development of these schools parallel those of the entire higher education community: for many years, private liberal arts colleges expanded in number and in enrollments. But since these schools are in several ways more vulnerable than others to the forces of demographics, inflation, the declining job market for college graduates, and changes in the attitudes and aspirations of students, for the last half-dozen years, growth has turned into decline. This vulnerability is also manifest in the decline in single-sex and religiously affiliated institutions. (Many of these institutions were Roman Catholic seminaries.) In addition, there are trends toward fewer but larger institutions and leveling total enrollments. Of the two types of private liberal arts colleges, the less selective, or Liberal Arts II, are by far the more seriously affected by these trends.

The period between the mid-'50's and the beginning of the '70's was a time of rapid growth for private liberal arts colleges in terms of numbers of institutions (see table 7). Particularly rapid expansion, it will be noted, occurred during the last half of the '60's, but since then the number of schools has been steadily declining. Most of the growth and decline has occurred among Liberal Arts II colleges, while the number of Liberal Arts I colleges has remained more or less constant. In more specific terms, there has been a 20 percent increase in the number of private liberal arts colleges, but since 1970-71 the num-

Table 7. Number of Liberal Arts I and II Colleges: United States and Outlying Areas, 1955-56 to 1976-77

	1955-56	1960-61	1965-66	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77
Total	524	571	621	688	675	669	652	642	631	629
Liberal arts I colleges	136	137	141	143	141	140	140	140	138	138
Liberal arts II colleges	388	434	480	545	534	529	512	502	493	491

NOTE. The number of institutions in each category was determined by tabulating classified institutions listed in the *Higher Education, Education Directory*, for each year. Note that in 1970 there were two institutions classified by Carnegie that were not listed in the *Directory* for that year.

SOURCE: The Carnegie Commission on Higher Education, *A Classification of Institutions of Higher Education*.

ber of Liberal Arts II colleges has declined by 10 percent and Liberal Arts I by 3 percent. At the same time, however, the private sector in general grew by 5.8 percent and the public sector by 9.9 percent.

Between 1966 and 1970, 119 private institutions opened, while only 19 closed, merged, became public, or otherwise changed status. But during the next half decade, from 1971 to 1975, 103 private institutions opened and 60 closed, merged, became public, or otherwise changed status. Of these 60, 50 were private liberal arts colleges; of the 103 institutions that opened, only 15 were private liberal arts colleges. But a recent detailed case study by Virginia Polytechnic Institute of 10 institutions that in some manner changed status indicates that only 2 actually ceased operations entirely. The study also indicates that not all of the schools that changed status did so because of adversity. Rather, changes in mission and philosophy sometimes prompted changes in status. The same study also estimates that of the 891 colleges founded between 1770 and 1870, 650 "died."[1] In other words, small colleges have historically had a high rate of demise.

Enrollments have followed a roughly similar pattern—first they expanded, but recently they have been erratic. The total number of students enrolled for degree-credit in all private liberal arts colleges rose steadily from about 273,000 in 1954 to more than 677,000 (by 148 percent) in 1975 (see table 8). As with numbers of institutions, the more dramatic changes occurred in Liberal Arts II colleges, where enrollment rose from 173,000 to 483,000, or by 179 percent, while at Liberal Arts I colleges it rose from 100,000 to 195,000, or by 94 percent. Again, the greatest growth period was the sixties. More recently, enrollments have slightly fluctuated, mainly in Liberal Arts II colleges. Enrollment growth in Liberal Arts I colleges has been more constant for 20 years, according to aggregate statistics.

Like other sectors of the higher education community, private liberal arts colleges may well experience declines in enrollments

TABLE 8.—Degree-Credit Enrollment in Liberal Arts I and II Colleges, by Classification: United States and Outlying Areas, Fall 1954 to Fall 1975

Fall	Liberal arts I and II colleges	Liberal arts I	Liberal arts II
1954.....	273,211	100,446	172,765
1959.....	373,381	124,302	249,079
1964.....	504,781	149,519	355,262
1969.....	632,535	175,320	457,215
1970.....	642,557	180,743	461,814
1971.....	651,373	182,455	468,918
1972.....	644,719	187,251	457,468
1973.....	642,233	188,231	454,002
1974.....	652,794	191,319	461,475
1975.....	677,089	194,532	482,557

NOTE: The total enrollment for institutions as reported in the *Education Directory* may differ from those figures presented in *Fall Enrollment in Higher Education* for the same academic year. See *Higher Education: Education Directory, 1975–1976* for further explanation.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, *Higher Education: Education Directory, 1954–55—1976–77.*

in the next decades. Howard R. Bowen and W. John Minter, in their 1976 study of private higher education, queried their sample of 100 schools concerning their immediate enrollment expectations and learned that only Liberal Arts I colleges anticipated (or reported that they anticipated) that enrollments would decline in the immediate future; Liberal Arts II colleges expected increases of up to 10 percent.[2] This optimism may be unwarranted, given the trends noted above in enrollments, numbers of institutions, and demographics.

A third trend in private liberal arts colleges is toward larger enrollments at individual institutions. While the trend in the total private sector is for a relatively steady proportion of large and small schools, the trend in private liberal arts colleges, like that in the public sector, is toward a decline in the proportion of smaller schools. The number of schools with fewer than 200 students, for example, declined by almost 64 percent between 1955 and 1976, while the number with between 200 and 499 students declined by about 66 percent. There

were increases in the numbers of schools at all higher enrollment levels and especially great increases at enrollment levels above 750. The number of schools with between 750 and 999 students increased by 133 percent, while the number of those with between 1,000 and 1,499 students rose by 266 percent (though the number of these has decreased recently). Even higher increases occurred in the number of schools with between 1,500 and 1,999 students (750 percent) and in the number with more than 2,000 students (1,175 percent) (see table 9).

The data confirm this broad tendency in Liberal Arts I colleges, except that among these institutions there was a 72 percent decline in the number of schools with fewer than 750 students (among liberal arts colleges generally, the decline began at the 500 student or below range, as was noted above). Above the 750 student level, the greater the size of enrollments, the greater the increase in the number of schools, with an increase from 2 to 25 in the number of schools with more than 2,000 students (see appendix table 1 for details).

The pattern in Liberal Arts II colleges, though less uniform, reveals that among them there have also been declines in the number of very small schools. Those with fewer than 200 students declined by 60 percent, while those with between 200 and 499 students declined by 64 percent. Increases occurred in all higher enrollment categories, with particularly large increases in the number of schools with between 1,000 and 1,499 students (from 11 to 106 institutions in this category which has experienced considerable fluctuation in numbers of institutions), in that with between 1,500 and 1,999 students (from 5 to 55), and in that with more than 2,000 students (from 2 to 27) (see appendix table 2).

From these data, at least two conclusions follow. First, the trend in private liberal arts colleges as a whole is toward larger institutions and away from smaller ones. This trend prevails in both Liberal Arts I and II colleges. Second, the remaining but shrinking number

TABLE 9.—Private Liberal Arts I and II Colleges, by Size of Enrollment: United States and Outlying Areas, Fall 1955 to Fall 1976

Enrollment size	1955		1960		1965		1970		1971		1972		1973		1974		1975		1976	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Under 200	73	13.9	45	7.9	37	5.9	39	5.6	39	5.8	34	5.1	26	4.0	26	4.0	28	4.4	26	4.1
200–499	235	44.8	198	34.7	122	19.6	100	14.5	91	13.5	92	13.8	101	15.5	97	15.1	85	13.4	79	12.6
500–749	109	20.8	142	24.9	164	26.4	160	23.2	143	21.2	133	19.9	141	21.6	134	20.8	126	20.0	119	18.9
750–999	54	10.3	93	16.3	129	20.7	146	21.2	146	21.6	142	21.2	121	18.6	120	18.6	117	18.5	126	20.0
1,000–1,499	39	7.4	69	12.1	117	18.8	152	22.0	158	23.4	164	24.5	152	23.3	156	24.2	156	24.7	143	22.8
1,500–1,999	10	1.9	18	3.2	38	6.1	62	9.0	64	9.5	64	9.6	70	10.7	65	10.1	71	11.3	85	13.5
2,000+	4	.7	6	1.1	14	2.2	29	4.2	34	5.0	40	6.0	41	6.3	44	6.8	48	7.6	51	8.1
Total institutions	524	100.0	571	100.0	621	100.0	688	100.0	675	100.0	669	100.0	652	100.0	642	100.0	631	100.0	629	100.0

*NOTE: Due to rounding, percentages may not add to 100.0 percent. The practice of the *Education Directory* is to categorize institutions on the basis of their previous year's enrollment. Thus, for example, these were in 1955 73 institutions with 1954 enrollments of less than 200.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, *Higher Education: Education Directory, 1955–56—1976–77.*

of very small private liberal arts colleges is comprised mainly of Liberal Arts II institutions.

A fourth trend in the evolution of private liberal arts colleges, and another in which they are coming more and more to resemble public schools, is that there is a decrease in the number of schools that claim religious affiliation and a concomitant decrease in the number of students enrolled in religiously affiliated schools. In documenting this trend it is not always easy to go beyond broad generalizations to discuss precise figures because the data regarding religious affiliation are provided by the institutions. In addition, the magnitude of the decline in the number and proportion of ecclesiastically aligned institutions may overstate reality, for some schools terminate a formal *de jure* relationship with a religious body, but preserve an informal *de facto* one. Since there are also varying degrees of religious affiliation, what constitutes sectarian affiliation to the administration of one school may not constitute it to another, so that in one case religious affiliation might go unreported when in another it would be reported. These practices thus constitute an important limitation on the data, the actual situation may not be accurately reflected.

In 1954–55, almost 60 percent of all private schools, or 721 institutions, claimed to have some kind of sectarian affiliation; 22 years later, fewer than half of them, or 785, claimed sectarian affiliation. Data reveal that the growth of the number of schools that claim they are religiously affiliated proceeded unabated through 1967–68, when 913 institutions declared themselves so aligned. In terms of proportion to the total number of private schools, though, the peak occurred 3 years earlier. Since roughly the mid-60's, then, that segment of the private sector that claims religious affiliation has been steadily waning (see appendix table 3 for details).

This trend is particularly evident among private liberal arts colleges. In 1955–56, there were almost 3 schools claiming they were religiously affiliated for every school that claimed it was independent, by 1976–77, that ratio had shrunk to less than 2 to 1. The apparent watershed years here, as above, were the mid-60's, when the number of schools claiming they were religiously affiliated reached 463, or 74.6 percent of all private liberal arts colleges. After that date, both the number and proportion of schools claiming religious affiliation declined, though the proportion of such schools was still 62.6 percent by 1976–77. Most of the growth and decline in this characteristic occurred among Catholic institutions (see table 10).

Among Liberal Arts I colleges, the ratio of schools claiming they were religiously affiliated to schools claiming they were independent shrank from 1:1 to 1:2 between 1955–56 and 1976–77. The decline in religious affiliation, as reported by the institution, has been steady during those 20 years and has affected both Catholic and Protestant institutions, though Catholic schools declined by proportionally greater amounts (see appendix table 4). Among Liberal Arts II colleges, the ratio of schools claiming they were religiously affiliated to schools claiming they were independent shrank from 4.6:1 in 1955–56 to 2.4:1 in 1976–77. Though the number of Liberal Arts II colleges claiming Catholic or Protestant affiliation was higher in 1976–77 than 20 years earlier, the proportion of these schools to the total has decreased since 1965–66, which was also the time when the number of Liberal Arts II colleges claiming a Catholic affiliation reached its peak. The number of schools claiming a Protestant affiliation reached its peak in 1971–72 (see appendix table 5). (It should be noted that the proportion of Liberal Arts II colleges claiming religious affiliation has increased slightly since 1973–74.)

In sum, the trend toward decreasing religious affiliation is particularly evident among the more selective (*i.e.*, Liberal Arts I) colleges, where the number of sectarian colleges is decreasing both in proportion to independent schools and real numbers. Among the less selective (*i.e.*, Liberal Arts II) colleges, the proportion of those with a religious affiliation has also shrunk, though

Table 10.—Private Liberal Arts I and II Colleges, by Affiliation:[1] United States and Outlying Areas, 1955-56 to 1976-77

Academic year	Total institutions	Affiliation						
		Independent		Religiously affiliated				
				Total				
		Number	Percent	Number	Percent	Catholic	Protestant	Other
1955-56	524	138	26.3	386	73.7	129	255	2
1960-61	571	152	26.6	419	73.4	153	263	3
1965-66	621	158	25.4	463	74.6	184	272	7
1970-71	688	243	35.3	445	64.7	169	271	5
1971-72	675	242	35.8	433	64.2	155	274	4
1972-73	669	245	36.6	424	63.4	149	271	4
1973-74	652	244	37.4	408	62.6	137	267	4
1974-75	642	240	37.4	402	62.6	135	264	3
1975-76	631	237	37.6	394	62.5	133	259	2
1976-77	629	235	37.4	394	62.6	130	260	4

[1] Institutional affiliation as listed in the *Education Directory* is reported by the institution.

NOTE: Percentages in all cases are percentages of the total. Due to rounding percentages may not add to 100.0%.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, *Higher Education. Education Directory, 1955-56—1976-77.*

the number of religiously affiliated schools is actually higher than it was 20 years ago.

This trend is paralleled by the declining enrollment figures at religiously affiliated private liberal arts colleges. In the 21 years between 1954 and 1975, the number of students enrolled in private liberal arts colleges with a religious affiliation reached a high in the mid-60's of more than 70 percent of the total number of students enrolled in all liberal arts schools. Within only 5 years, that proportion dropped by more than 10 percent and has continued to decline ever since. Still, as of 1975, 55.4 percent of the students in all private liberal arts colleges went to institutions claiming a religious affiliation. The number and proportion of students attending private liberal arts colleges claiming a Roman Catholic affiliation were also the highest in the mid-1960's, but then dropped significantly by 1969 and decreased without interruption through 1973; small increases occurred in 1974 and 1975. The proportion of enrollments in Protestant schools, on the other hand, has been almost steadily declining in relation to total private liberal arts college enrollments since 1954. The actual number of students in Protestant schools, though, peaked in 1970, and since then has been declining (see table 11).

By far the greater number of students who attend religiously affiliated private liberal arts colleges go to Liberal Arts II schools. And a far greater proportion of the students in Liberal Arts II colleges attend institutions claiming religious affiliation (64.5 percent in 1975) than is the case in Liberal Arts I colleges (32.9 percent in 1975). In both types of institution, the proportion of students enrolled in schools claiming religious affiliation peaked in the mid or late 1960's; subsequently that proportion plummeted in Liberal Arts I colleges (from 47 to 33 percent) and decreased in Liberal Arts II institutions (from 84 to 65 percent). Notwithstanding these decreases, the religiously affiliated private liberal arts colleges continue to attract a significant, but apparently diminishing, minority of students, and that need is being addressed by mainly Liberal

TABLE 11.—Degree-Credit Enrollment for Liberal Arts I and II Colleges, by Affiliation.[1] United States and Outlying Areas, Fall 1954 to Fall 1975

Religious affiliation of institution	1954		1959		1964		1969		1970	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Perce
Total	273,211	100.0	373,381	100.0	504,781	100.0	632,535	100.0	642,557	100
Independent	85,181	31.1	108,793	29.1	138,147	27.4	245,317	38.8	255,811	39
All religious affiliations	188,030	68.9	264,588	70.9	366,634	72.6	387,218	61.2	386,746	60
Roman Catholic	58,749	21.5	91,103	24.4	131,803	26.1	129,205	20.4	122,416	19
Protestant	128,594	47.1	172,071	46.1	231,406	45.8	254,482	40.2	261,304	40
Other	687	0.3	1,414	0.4	3,425	0.7	3,531	0.6	3,026	0

	1971		1972		1973		1974		1975	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	651,373	100.0	644,719	100.0	642,233	100.0	652,794	100.0	677,089	100
Independent	266,720	40.9	273,577	42.4	282,485	43.9	288,708	44.2	301,989	44
All religious affiliations	384,653	59.1	371,142	57.6	359,748	56.1	364,086	55.9	375,100	55
Roman Catholic	122,095	18.7	115,800	18.0	114,087	17.8	117,841	18.1	130,624	19
Protestant	259,522	39.8	252,639	39.2	243,987	38.0	245,867	37.6	240,691	35
Other	3,036	0.5	2,703	0.4	1,674	0.3	378	0.1	3,785	0

[1] Institutional affiliation as listed in the *Education Directory* is reported by the institution.

NOTE. Percentages in all cases are percentages of the total. Due to rounding, percentages may not add to 100.0 percent.

SOURCE. U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, *Higher Education. Education Directory, 1955-56 1976-77.*

Arts II colleges (see appendix tables 6 and 7).

A fifth trend, parallel to the decline in both the number of private liberal arts schools claiming religious affiliation and the number of students attending such institutions, is the tendency toward a decline in both the number of single-sex private liberal arts colleges and the number of students attending such schools. For example, the number of men's colleges declined from 56 in 1955–56 to 26 in 1976–77 (or by 54 percent), and the number of women's colleges declined from 156 to 79 (or by about 50 percent). Meanwhile, the number of coeducational colleges rose from 306 to 515 (an increase of almost 68 percent), so that they now comprise about 82 percent of all private liberal arts colleges. As before, the mid-60's was the period when single sex institutions were most numerous. Subsequently, the number of men's colleges decreased by 63 percent, and the number of women's colleges decreased by 54 percent (see table 12).

For Liberal Arts I colleges, the statistics are not quite so dramatic, but the trends are similar. The number of coeducational schools increased from 59 in 1955–56 to 96 in 1976–77 (or by 63 percent) and comprised 69.6 percent of all Liberal Arts I colleges, while the number of men's colleges shrank from 22 to 6 (or by 73 percent), and the number of women's schools dwindled from 51 to 32 (or by 37 percent). Women's Liberal Arts I colleges thus are preserving more tenaciously than men's schools their single-sex student bodies. On the other hand, a number of single-sex private liberal arts colleges participate in joint programs with opposite-sex and coeducational schools while still claiming to be single-sex institutions. In one sense, then, the decline in the number of single-sex institutions may actually be greater than the figures show (see appendix table 8). Most commentators see this trend continuing.

Women's Liberal Arts II colleges appear to be less secure than women's Liberal Arts I colleges, though the converse seems to be the case among men's schools. Between 1955–56 and 1976–77, the number of women's colleges shrank from 105 to 47 (or by 55 percent), while men's colleges declined in number from 34 to 20 (or by 41 percent). Meanwhile, the number of coeducational institutions increased from 247 to 419 (or by 70 percent) and comprised 85 percent of the Liberal Arts II sector, though

TABLE 12.—Private Liberal Arts I and II Colleges, by Sex of Student Enrollment. United States and Outlying Areas, 1955–56 to 1976–77

Academic year	Total liberal arts I and II institutions	Coed		Male		Female		Coordinate [1]	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent
1955–56	524	306	58.4	56	10.7	156	29.8	6	1.2
1960–61	571	338	59.2	62	10.9	166	29.1	5	0.9
1965–66	621	370	59.6	70	11.3	173	27.9	8	1.3
1970–71	688	495	72.0	51	7.4	130	18.9	12	1.7
1971–72	675	512	75.9	43	6.4	109	16.2	11	1.6
1972–73	669	518	77.4	37	5.5	103	15.4	11	1.6
1973–74	652	518	79.4	31	4.8	95	14.6	8	1.2
1974–75	642	514	80.1	31	4.8	89	13.9	8	1.3
1975–76	631	515	81.6	32	5.1	76	12.0	8	1.3
1976–77	629	515	81.9	26	4.1	79	12.6	9	1.4

[1] Institutions maintaining separate colleges for men and women.

NOTE: Due to rounding, percentages may not add to 100.0%.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, *Higher Education. Education Directory, 1955–56—1975–76.*

they too have declined slightly in number since 1972–73 (see appendix table 9). In any event, there are more women's private liberal arts colleges than there are men's private liberal arts colleges, but the trend is clearly toward an increase in coeducational schools. In this respect, too, then private liberal arts colleges are aping the public sector.

A decision to become coeducational or nonsectarian or both might be forced upon a school which found itself facing financial difficulties. Indeed, these decisions are occasionally cited as circumstantial evidence that private liberal arts colleges are in precisely those straits. It has doubtless been the case that some schools have become nonsectarian and coeducational in order to attract more students and hence more money, but the data do not seem to confirm it in general. The largest growth in the number of coeducational colleges and, correspondingly, the largest decline in the number of men's and women's colleges as well as the largest decline in religiously affiliated schools and enrollments, occurred not during or after a period of general economic distress (the early 1970's) but during a period of intense student activism (the late 1960's). Hence, one conclusion from these data may be that colleges became coeducational and nonsectarian perhaps as much in response to student demand, or because of philosophical, social, and political considerations, as anything else. It is simply not true that changes in the nature of the student body or of religious affiliation are mandated only under the immediate threat of bankruptcy. However, it might be argued that some private liberal arts colleges changed the natures of their student bodies and ecclesiastical affiliation because of their foresight about enrollment declines and financial difficulties.

Notwithstanding these recent declines in the numbers of institutions and enrollment growth rates, as well as in the number of small, religiously affiliated, and single-sex schools, one may reasonably conclude that private liberal arts colleges in general continue to be attractive to a significant number of students: after all, as of 1975, 7 percent of all college students (and 29.4 percent of all students in private colleges) attended private liberal arts colleges. Still, it must be noted that these schools do not seem so attractive to students as others do: though their total enrollments increased by 5.4 percent between 1970 and 1975, the number of institutions shrank by 8.3 percent; meanwhile, enrollments in the public sector grew by 28 percent and even in the overall private sector by 8.7 percent. It was noted above that the slow rate of growth of the private sector vis-a-vis the public may very well reflect administrative decisions not to grow and should not be taken as a sign that the private sector is not so prosperous as the public. On the other hand, the decline in the number of institutions is probably to be seen as a sign that that sector is not so prosperous as it once was. As chapter V suggests, part of the decline is due to price differentials between the public and private sectors, though there are other reasons too. The next chapter suggests that part of the decline is also due to changes in students' goals and ambitions.

CHAPTER II.—NOTES

1. Loyd D. Andrew and Burton D. Friedman, *A Study of the Causes for the Demise of Certain Small, Private, Liberal Arts Colleges in the United States.* (U.S. Office of Education Contract No. 300-75-0376.) College of Education, Virginia Polytechnic Institute and State University, 1976, pp. I, 2–4.

2. Howard R. Bowen and W. John Minter, *Private Higher Education. Second Annual Report on Financial and Educational Trends in the Private Sector of American Higher Education.* Washington. Association of American Colleges, 1976, p. 12. See pp. 3–6 for a description of their sample of private institutions.

CHAPTER III

Curriculum and Changes in Student Characteristics

The focus in this chapter shifts to students and centers on such matters as changes in the ages, ethnic backgrounds, religious preferences, high school grades, SAT scores, values, and aspirations. Though there are no extant data regarding these characteristics over time for Liberal Arts I and II colleges as separate categories, the data tabulated for 4-year colleges contain information gathered from numerous Liberal Arts I and II schools, thereby permitting trends for students in these schools to be at least tentatively identified. From these data one can conclude that entering college freshmen in general are becoming older, less white, more secular, apparently less academically motivated and less oriented toward the humanities, and more job-oriented in majors and professional aspirations.

Changes in student characteristics have important effects upon institutions, especially upon their curriculums. And since private liberal arts colleges have in a sense the most traditional curriculums, the impact upon their programs of changes in student attitudes is at times quite dramatic. In what appears to be at least in part an attempt to forestall declining enrollments, some private liberal arts colleges have relaxed requirements for admission and graduation and have introduced many new programs emphasizing individual needs and desires. Of course, since most other kinds of schools have adopted these or similar tactics, many private liberal arts colleges have followed suit in order to survive; though it would be inaccurate to say that survival was the only reason.

Because of such stimuli as the efforts of schools to attract students from different segments of the population, the desire of many workers (often supported by their employers) to increase their job skills, increasing unemployment and thereby increased leisure, the increasing number of women who are deciding to pursue careers, and an increasingly competitive job market, the age of entering freshmen in higher education in general increased slightly during the 10 years between 1966 and 1976. More precisely, according to data based on surveys by Alexander Astin, *et al.*, of freshmen at nearly 400 public and private universities and colleges, the proportion in 1976 of students who were 19 years old or older when entering college was greater than it was in 1966 (but smaller than it was in 1970), though by far the greater number was 18 years old. The same trait prevails in all 4 year colleges, both public and private (sectarian and nonsectarian) (see table 13).

Thanks in large measure to numerous social action programs, students from racial minorities made steady gains during this same period (see table 14). This table shows that the proportion of Black and "Other" minority students in higher education in general increased markedly; though the proportion of all students who were Black declined slightly between 1970 and 1976, the proportion of "Other" minority students rose almost threefold. In 4-year colleges, the proportion of Blacks has grown steadily, but the proportion of "Other" minority students first declined by almost half and later rose above the 1966 level. Public and sectarian private 4-year schools have experienced consistent and significant growth in minority student enrollments. The proportion of minority students in private nonsectarian 4-year schools, however, has increased erratically and less strikingly, though the overall proportion is still roughly comparable to that in other institutions (about 12.8 percent of total enrollments).

Another change in the characteristics of entering freshmen is that their average high school grades have been steadily increasing.

TABLE 13.—Age: Weighted National Norms in Percentages for All First-Time, Full-Time Freshmen at Institutions of Higher Education, by Control and Affiliation, Fall 1966, Fall 1970, and Fall 1976

	All institutions			4-year colleges					
				All			Public		
	1966	1970	1976	1966	1970	1976	1966	1970	1976
Age (by Dec. 31 of year shown):									
16 or younger		0.1	0.1		0.1	0.1		0.1	0.1
17		3.8	3.8		4.2	3.8		4.2	4.0
18		73.2	74.1		80.1	77.1		81.3	77.5
19	[1] 19.8	14.4	16.6	14.9	12.3	15.7	15.5	11.2	14.7
Older than 19		8.4	5.5		3.3	3.1		3.1	3.8

	4-year colleges								
	Private nonsectarian			Protestant			Catholic		
	1966	1970	1976	1966	1970	1976	1966	1970	1976
Age (by Dec. 31 of year shown):									
16 or younger		0.2	0.2		0.1	0.1		0.1	0.2
17		5.9	4.3		3.3	3.1		2.8	3.4
18		78.1	77.4		77.3	74.2		81.7	79.7
19	14.9	12.3	15.6	14.9	15.3	19.9	13.1	12.5	14.5
Older than 19		3.5	2.4		4.0	2.8		2.9	2.4

[1] Number of students 19 or older.

SOURCE: Alexander Astin, *et al.*, *The American Freshman. National Norms for Fall 1966, 1970, 1975* (3 publications).

TABLE 14.—Racial Background: Weighted National Norms in Percentages for all First-Time, Full-Time Freshmen at Institutions of Higher Education, by Control and Affiliation, Fall 1966, Fall 1970, and Fall 1976

	All institutions			4-year colleges					
				All			Public		
	1966	1970	1976	1966	1970	1976	1966	1970	1976
Racial background:[1]									
White/Caucasian	90.7	88.6	86.2	88.8	90.1	84.8	85.5	88.7	81.1
Black/Negro/Afro-American	5.0	9.1	8.4	7.7	8.1	11.6	10.1	9.2	14.7
Other	4.3	2.2	6.9	3.5	1.9	5.2	4.4	2.1	5.9

	4-year colleges								
	Private nonsectarian			Protestant			Catholic		
	1966	1970	1976	1966	1970	1976	1966	1970	1976
Racial background:[1]									
White/Caucasian	84.7	89.3	89.1	91.9	91.0	89.3	94.2	93.9	89.7
Black/Negro/Afro-American	12.9	9.1	7.6	6.0	8.0	9.2	1.1	3.5	5.9
Other	2.4	1.6	5.2	2.1	1.0	3.1	4.8	2.6	5.9

[1] Percentages will add to more than 100 if any students checked more than one category.

SOURCE: Alexander Astin, *et al.*, *The American Freshman: National Norms for Fall 1966, 1970, 1975* (3 publications).

TABLE 15.—Average Grade in High School: Weighted National Norms in Percentages For All First-Time, Full-Time Freshmen at Institutions of Higher Education, By Control and Affiliation, Fall 1966, Fall 1970, and Fall 1976

	All institutions			4-year colleges					
				All			Public		
	1966	1970	1976	1966	1970	1976	1966	1970	1976
A+/A/A−	15.4	14.5	19.7	17.7	16.6	23.3	11.7	12.2	19.8
B+/B/B−	54.1	57.9	60.4	58.2	62.9	62.2	58.6	66.7	64.8
C+/C	29.7	26.9	19.4	23.5	20.2	14.3	29.0	20.7	15.0
D	0.8	0.7	0.4	0.5	0.3	0.3	0.7	0.2	0.3

	4-year colleges								
	Private nonsectarian			Protestant			Catholic		
	1966	1970	1976	1966	1970	1976	1966	1970	1976
A+/A/A−	21.9	22.8	30.2	19.7	16.8	25.0	20.7	15.3	24.7
B+/B/B−	55.0	59.7	57.9	58.2	55.8	58.6	61.0	61.0	63.2
C+/C	22.6	17.1	11.7	21.7	26.6	15.9	18.1	23.4	11.8
D	0.5	0.5	0.1	0.4	0.8	0.4	0.2	0.2	0.2

SOURCE: Alexander Astin, et al., *The American Freshman. National Norms for Fall 1966, 1970, 1976* (3 publications).

whereas in 1966, 69.5 percent of them had average grades of B− or better, in 1976, 80.1 percent of them did (see table 15).

This upward trend also prevailed at all 4-year colleges, where in 1966, 75.9 percent of the entering freshmen had high school averages of B− or above; in 1976, 85.5 percent did. Students in private nonsectarian 4-year colleges showed the largest increase in this trait: in 1966, 76.9 percent of the entering freshmen had high school averages of B− or better, while in 1976, 88.1 percent of them did.

At first glance, these data on high school grades seem to imply that colleges and universities are becoming more selective, but scores on other records suggest that students were actually less well prepared in 1976 than in 1966. For one thing, as is well known, national average scores on both the SAT and the ACT have declined significantly. The average scores on the SAT for entering students at the 100 private institutions in the 1976 Bowen-Minter study have also been declining and actually have done so at a rate slightly ahead of the decline among the general population (see table 16).

As SAT scores for students at Liberal Arts I and II colleges in the Bowen-Minter sample have declined, so too have their high school class standings: in 1969–70, 86 percent of the entering freshmen at Liberal Arts I colleges ranked in the top two-fifths of their high school classes, with 65 percent of them in the top one-fifth; but in 1975–76, only 82 percent ranked in the top two-fifths, and only 57 percent of them in the top one-fifth (see table 17).

Among Liberal Arts II colleges, a parallel trend exists toward declining high school class standing: in 1969–70, 68 percent stood in the top two-fifths of their high school classes, 39 percent of them in the top one-fifth, but in 1975–76, only 56 percent stood in the top two-fifths, 34 percent of them in the top one-fifth. Thus, grade inflation seems to account for much of the

TABLE 16.—Average Scholastic Aptitude Test Scores of Entering Freshmen in Four Types of Private Institutions of Higher Education: United States, 1969–70 to 1975–76

	Doctoral-granting universities	Comprehensive universities and colleges	Liberal arts colleges I	Liberal arts colleges II	Four types of institutions combined
SAT combined scores:					
1969–70 autumn	1,127	1,051	1,197	983	1,063
1974–75 autumn	1,071	1,009	1,137	924	1,010
1975–76 autumn	1,068	1,002	1,114	924	1,005
Percentage change:					
1969–70 to 1974–75	−5	−4	−5	−6	−5
1974–75 to 1975–76	0	−1	−2	0	−1

SOURCE: Howard R. Bowen and W. John Minter, *Private Higher Education*, p. 15.

TABLE 17.—Rank in High School Class of Entering Freshmen in Four Types of Private Institutions of Higher Education: United States, 1969–70 to 1975–76

[In percent]

Percentage by rank in high school class	Doctoral-granting universities	Comprehensive universities and colleges	Liberal arts colleges I	Liberal arts colleges II
Top fifth:				
1969–70	70	45	65	39
1974–75	67	51	64	35
1975–76	71	48	57	34
2d fifth:				
1969–70	23	30	21	29
1974–75	24	26	21	26
1975–76	18	25	25	25
3d fifth:				
1969–70	5	19	10	19
1974–75	6	16	10	20
1974–76	6	17	12	20
Bottom two-fifths:				
1969–70	2	6	4	13
1974–75	3	7	5	19
1975–76	4	8	5	17

SOURCE: Howard R. Bowen and W. John Minter, *Private Higher Education*, p. 15.

increase in the average high school grades of students in private liberal arts colleges. (And, as is well-known, grade inflation has reached almost epidemic proportions.) The data on high school class standing and SAT scores imply that private liberal arts colleges cannot or do not wish to attract as many abler students as formerly.

The degree-completion time for students who attend private schools is shorter than it is for students who attend public schools. This trend holds for virtually all types of students: proportionally more men and women, more Whites and Blacks, more students of both high and low ability, and more of high income and low income backgrounds in private institutions than in public ones took their bachelors' degrees in the traditional 4 years (see table 18).

The differences between public institutions and private liberal arts colleges with respect to this tendency are particularly dramatic, especially in Liberal Arts II colleges. The most that can safely be concluded from these data is that relatively more students in private schools, especially Liberal Arts I and II colleges, graduate "on time" than do in public schools. Why this should be so is difficult to determine. In part, it may have to do with the generally somewhat higher academic abilities of students in private liberal arts colleges, their often more personalized instruction and more frequent contact with professors, and their possibly greater freedom from financial worries.

Of all the changes in students having impact upon curriculums in private liberal arts colleges, perhaps none is so great as the shift in their academic and career aspirations. For example, the proportion of freshmen nationwide who planned from the start

TABLE 18.—Four-Year Completion of Baccalaureate by the 1968 Freshman Class, Nationwide, by Sex, Race, Ability, and Income, and by Institution Type and Control

[In percent]

	Research universities I		Research universities II		Doctoral-granting universities I		Doctoral-granting universities II		Comprehensive universities and colleges I		Comprehensive universities and colleges II		Liberal arts colleges I		Liberal arts colleges II	
	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private	Public	Private
Sex:																
Male	52.8	[2]83.3	52.6	[1]71.4	50.1	52.6	50.4	[1]66.4	47.4	[1]63.5	52.9	[1]71.9	58.3	[1]75.4	27.7	[2]57
Female	59.8	[2]83.0	66.3	[1]80.8	[1]61.1	50.8	64.3	70.0	62.7	72.7	72.3	71.7	61.9	[1]76.0	38.6	[2]63
Race:																
White	56.4	[2]83.5	57.9	[1]73.8	54.8	52.1	56.7	[1]68.6	56.6	[1]67.2	65.4	71.8	60.6	[1]76.0	34.5	[2]61
Black	43.4	[2]73.0	41.3	[2]80.4	46.3	47.6	24.1	[2]46.9	45.9	43.8	54.9	[1]71.7	50.4	[1]70.3	0.0	[2]65
Ability:																
High ability	62.7	[2]84.4	64.5	[1]75.8	63.0	60.9	67.3	71.3	65.5	70.4	78.6	80.1	61.6	[1]79.1	45.5	[2]69
Low ability	37.8	[2]73.8	41.4	[2]61.5	41.1	40.0	36.8	[1]54.3	41.9	[2]62.8	50.9	57.4	0.0	[2]63.4	27.8	[2]52
Income:																
High income	59.2	[2]34.9	55.4	[2]76.1	56.1	54.2	59.8	[1]71.2	56.4	[1]70.4	66.3	74.4	58.0	[1]77.1	27.3	[2]60
Low income	50.0	[2]76.2	61.3	67.1	52.3	47.7	49.1	[1]59.1	54.5	59.0	61.9	67.3	71.0	72.0	35.8	[2]60
Total	56.0	[2]83.2	57.5	[1]74.0	54.6	52.0	56.1	[1]68.2	55.4	[1]66.8	63.3	71.8	60.2	[1]75.9	32.1	[2]60

[1] More than 10% higher than in corresponding institutions.
[2] More than 20% higher than in corresponding institutions.

NOTE. Ability was measured by high school grade averages. High-ability students are defined as those having B+ or better averages in high school; low-ability students those making B or lower averages. High income students were those reporting parental incomes of $[illegible],000 and above for 1967; low-income students were those reporti parental income less than $10,000.

SOURCE. Engin A. Holstrom and Paula R. Knepper, *Four Year Baccalaureate Completion Rates. A Limited Comparison of Student Success in Private And Public Four-Year Colleg and Universities.* Pp. 31, 33.

to pursue degrees beyond the baccalaureate steadily increased between 1966 and 1976, according to Astin. The proportion of those who planned to take medical or legal degrees increased especially. The same tendency exists among entering freshmen in all 4-year colleges, with, again, particularly marked increases in the proportion of students who intended to pursue medical and legal degrees. At the same time, the proportion of entering freshmen who intended to take masters and doctoral degrees steadily declined. On the other hand, the proportion of those who intended to pursue "other" awards also increased markedly, but these students still comprised only a small minority—merely 3.3 percent of the total and even less in private liberal arts colleges—in 1976 (see table 19).

This change in degree aspirations is accompanied by the tendency of freshmen who entered college in 1976 to choose majors different from those chosen by freshmen who entered in 1966 (see table 20). Thus, for example, the proportion of students initially choosing to major in English, history, and other humanities dropped from a total of 15.9 percent in all institutions in 1966 to 6.3 percent in 1976. This trend prevails in both public and private (sectarian and nonsectarian) institutions. The greatest increases occurred in those majors that Astin collectively labels "Other

TABLE 19.—Highest Degree Planned. Weighted National Norms in Percentages for all First-time, Full-time Freshmen at Institutions of Higher Education, By Control and Affiliation, Fall 1966, Fall 1970, and Fall 1976

	All institutions			4-year colleges					
				All			Public		
	1966	1970	1976	1966	1970	1976	1966	1970	1976
None	5.5	2.1	3.2	3.9	1.0	2.1	4.8	1.0	2.1
Associate (A.A. or equivalent)	5.6	7.6	8.1	1.3	1.6	1.6	2.2	1.7	1.6
Bachelor's (B.A., or B.S.)	38.7	38.3	35.6	39.0	40.4	34.4	41.2	44.7	37.3
Master's (M.A., or M.S.)	31.7	31.2	28.6	36.9	36.6	33.8	38.5	37.4	35.5
Ph. D. or Ed. D	9.8	9.7	8.7	11.0	11.2	11.1	7.9	8.9	10.4
M.D., D.O., D.D.S., or D.V.M	4.9	4.6	7.1	4.6	4.0	7.7	2.7	2.7	5.6
LL.S. or J.D. (law)	1.5	3.5	4.8	1.5	3.5	6.0	0.7	2.4	4.7
B.D. or M. Div. (divinity)	0.3	0.4	0.6	0.3	0.5	0.7	0.2	0.2	0.5
Other	2.0	2.6	3.3	1.4	1.2	2.5	1.9	1.1	2.5

	4-year colleges								
	Private nonsectarian			Protestant			Catholic		
	1966	1970	1976	1966	1970	1976	1966	1970	1976
None	3.1	1.0	1.6	3.2	1.4	3.2	3.5	1.1	1.9
Associate (A.A. or equivalent)	1.3	1.7	1.0	0.7	1.9	2.3	0.4	1.2	1.7
Bachelor's (B.A., or B.S.)	30.5	34.5	28.0	43.0	40.6	33.8	41.7	41.6	32.9
Master's (M.A., or M.S.)	35.2	33.9	32.6	35.1	32.8	30.1	35.5	32.6	33.5
Ph.D. or Ed.D.	17.2	14.3	14.6	9.4	10.4	10.3	9.7	9.5	9.3
M.D., D.O., D.D.S., or D.V.M	8.6	6.8	10.9	5.3	5.6	9.2	5.2	5.8	10.2
LL.S. or J.D. (law)	3.1	5.8	8.4	1.6	4.1	6.1	1.9	5.5	7.8
B.D. or M. Div. (divinity)	0.2	0.6	0.8	0.5	1.4	1.7	0.5	1.1	0.4
Other	1.0	1.2	2.1	1.2	1.8	3.3	1.5	1.7	2.3

SOURCE: Alexander Astin, et al., *The American Freshman. National Norms for Fall 1966, 1970, 1976* (3 publications).

TABLE 20.—Probable Major Field of Study. Weighted National Norms in Percentages for All First-Time, Full-Time Freshmen at Institutions of Higher Education, By Control and Affiliation, Fall 1966, Fall 1970, and Fall 1976

Probable Major Field of Study	All institutions			4-year colleges					
				All			Public		
	1966	1970	1976	1966	1970	1976	1966	1970	1976
Agriculture (including forestry)	1.9	2.0	3.6	1.3	1.3	1.7	2.3	1.5	1.2
Biological sciences	3.7	3.5	6.2	4.3	4.0	7.4	3.7	3.7	6.1
Business	14.3	16.2	20.9	11.5	12.7	17.0	15.7	15.3	16.6
Education	10.6	11.6	9.3	12.6	15.5	13.3	17.2	20.8	15.8
Engineering	9.8	8.6	8.5	7.2	8.2	6.2	5.2	6.1	7.2
English	4.4	3.0	1.0	5.8	3.7	1.5	4.6	3.6	1.2
Health Professions	5.3	7.4	6.9	3.7	5.4	6.7	3.5	5.3	6.9
History, political science	6.8	5.4	3.1	8.2	6.3	4.5	6.9	5.8	3.7
Humanities (other)	4.7	3.5	2.2	6.1	4.0	2.8	4.9	2.7	1.6
Fine Arts	8.4	9.2	6.1	8.2	8.5	6.8	7.6	8.0	6.5
Mathematics or statistics	4.5	3.3	1.0	6.0	4.3	1.4	5.7	4.3	1.4
Physical sciences	3.3	2.3	2.7	3.6	2.6	3.2	2.7	2.3	2.9
Pre-professional	7.2	7.0	.....	6.4	5.9	.....	4.2	4.1	.....
Social sciences	8.2	8.9	5.6	9.3	10.0	7.8	7.2	8.8	8.2
Other technical fields	2.2	3.7	7.5	1.8	3.0	5.3	3.4	3.5	5.5
Other nontechnical fields	2.7	2.4	10.7	2.5	2.6	9.3	3.5	1.8	9.9
Undecided	1.9	2.2	4.7	1.6	2.1	5.2	1.5	2.3	5.3

Probable Major Field of Study	4-year colleges								
	Private nonsectarian			Protestant			Catholic		
	1966	1970	1976	1966	1970	1976	1966	1970	1976
Agriculture (including forestry)	1.3	1.6	3.8	0.6	0.9	1.2	0.0	0.5	0.4
Biological sciences	6.1	4.8	10.1	4.6	4.8	7.9	4.2	3.8	8.0
Business	10.9	7.6	16.7	8.5	11.1	16.7	9.7	12.9	20.4
Education	8.8	8.7	8.1	12.8	14.3	13.6	8.2	9.6	9.4
Engineering	3.1	4.5	7.0	3.8	3.0	3.1	3.4	1.9	4.8
English	6.7	5.0	2.3	6.4	3.6	1.5	8.8	4.7	1.8
Health Professions	2.6	4.8	4.1	3.6	5.9	6.8	7.3	10.2	11.3
History, political science	11.2	8.5	6.2	8.8	6.3	4.9	9.6	8.5	5.0
Humanities (other)	6.7	6.9	4.2	7.4	6.3	4.6	8.2	5.5	3.0
Fine Arts	7.3	10.9	7.1	9.7	10.5	8.2	8.6	7.9	5.7
Mathematics or statistics	5.9	3.9	1.4	6.1	4.1	1.5	6.5	4.9	1.5
Physical sciences	4.8	2.7	4.1	3.3	2.2	3.2	3.1	2.1	2.3
Pre-professional	10.2	9.2	.....	7.7	8.1	.....	7.5	9.5	.....
Social sciences	11.6	13.5	7.1	11.8	12.6	7.6	11.2	12.8	7.3
Other technical fields	0.6	3.7	4.6	0.7	1.8	4.6	0.6	1.7	6.5
Other nontechnical fields	0.5	1.6	8.3	2.1	2.3	8.6	1.6	1.8	9.7
Undecided	1.6	2.1	5.0	2.0	2.3	3.9	1.5	1.7	3.6

SOURCE. Alexander Astin, et al., *The American Freshman. National Norms for Fall 1966, 1970, 1976* (3 publications).

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technical fields" and "Other nontechnical fields," where the total proportion almost quadrupled from 4.9 percent in 1966 to 18.2 percent in 1976. Thus, there has been a marked increase in the proportion of freshmen interested in nontraditional majors. The proportion of entering freshmen who were undecided about their majors has grown about 2 and one-half times (to 4.7 percent in 1976). These general trends again obtain in both public and private (sectarian and nonsectarian) institutions. These data seem, in part at least, to reflect students' responses to worsening job opportunities for those who major in the traditional humanities fields, especially for those hoping to teach.

Other data support this speculation, for the proportion of entering freshmen nationwide who intended to become teachers (elementary, secondary, or college) dropped sharply from 23.5 percent in 1966 to 8.4 percent in 1976, though there was a slight increase over the 1975 figure (see table 21). The proportion of those who planned to become secondary teachers dropped by almost 75 percent. This trend once more prevails among public and private (sectarian and non sectarian) institutions in general. Marked increases occurred among those who intended to become farmers, nurses, other nonmedical-degree health workers, as well as those who are undecided.

In other words, these data show that students are rejecting the traditional liberal arts curriculum in favor of more specifically job-oriented majors. The figures do not necessarily indicate that students are signfficantly more materialistic than they were in the 1960's as much, perhaps, as that they are acutely aware of the difficulty of finding work after college. After all, since 1971 the rate of unemployment has exceeded 5 percent, except for 1 year, and in 1975 it climbed to 8.5 percent, though by June 1976 it had declined to 8.0 percent. It has already been noted that there is considerable talk nowadays about the declining economic returns on a college education. Whether this talk is in fact accurate is perhaps not so important as that many people, students included, seem to believe it is.

Of course, changes in degree aspirations and choices of majors could not occur without some fundamental changes in what students consider to be essential, goals and values. Data on student characteristics (see appendix table 10) show that the objectives cited most by freshmen in 1976 were to be authorities in their fields (cited by 70.1 percent of the students), followed by helping others in difficulty (63.1 percent), developing a philosophy of life (60.8 percent—not on the 1966 questionnaire), raising families (57.2 percent—also not on the 1966 questionnaire), and being very well-off financially (53.1 percent). Just a decade earlier, though, the priorities were different: the most frequently cited was to help others in difficulty (68.5 percent), followed by being authorities in their fields (66.0 percent), keeping up with political affairs (57.8 percent), being successful in their own businesses (53.0 percent), and being very well-off financially (43.9 percent). These figures suggest a resurgence, after the upheavals of the Viet Nam years, of middle-class or traditional values.

There also appear to be major changes of a conservative nature in what might loosely be called students' political and social attitudes. For example, as noted above, keeping up with political affairs dropped sharply in importance; in 1966, 57.8 percent of the students thought it was important, compared to only 37. 4 percent in 1976, the year of the Bicentennial and a presidential election. Influencing the political structure declined slightly in importance too: in 1970, 18.3 percent considered it essential, but in 1976 only 15.2 percent did. While developing a philosophy of life still mattered very much to students in 1976 (60.8 percent), in 1970 it was even more important (75.6 percent). In addition, while students seemed to be not only less politically radical in 1976 than in 1966, they seemed to be also less socially oriented than they were before. In 1976 only 57.2 percent thought it was essential to raise families, while in 1970, 67.5 percent thought it was.

Fewer students in 1976 than in 1970 considered it essential to influence social values, and the proportion that thought it important to become community leaders also declined markedly. In 1976, in fact, that question was not even asked.

This conservative tendency, among undergraduates at least, is confirmed by Martin Trow in a report for the Carnegie Council on Policy Studies in Higher Education. Trow notes that the greatest changes in political attitudes occurred among those

TABLE 21.—Probable Career Occupation. Weighted National Norms in Percentages for all First-time, Full-time Freshmen at Institutions of Higher Education, By Control and Affiliation, Fall 1966, Fall 1970, and Fall 1976

Probable Career Occupation	All institutions			4-year colleges					
				All			Public		
	1966	1970	1976	1966	1970	1976	1966	1970	1976
Artist (including performer)	6.6	6.2	6.8	6.2	5.7	7.8	5.2	5.3	7.5
Businessman	11.6	11.4	16.4	9.9	10.3	15.0	10.9	11.5	14.5
Clergy or religious worker	1.0	0.8	0.6	1.4	1.1	1.2	0.4	0.3	0.2
Doctor (M.D. or D.D.S.)	4.8	3.9	4.8	4.5	3.4	5.7	2.4	1.0	3.8
Educator (college teacher)	1.8	1.0	0.4	2.1	1.1	0.5	1.8	2.2	0.5
Educator (secondary)	14.1	11.3	3.7	18.5	15.4	5.7	25.6	19.4	6.3
Educator (elementary)	7.6	3.0	4.3	9.9	10.9	6.5	13.0	14.1	7.6
Engineer	8.9	7.5	7.8	6.6	7.5	5.5	4.8	5.9	5.9
Farmer or forester	1.8	1.8	3.0	1.4	1.4	1.9	2.3	1.4	1.7
Health professional (non-M.D.)	4.7	4.5	7.3	4.1	4.1	6.6	4.9	4.2	6.9
Lawyer	3.9	3.8	4.3	4.0	3.8	5.5	2.7	2.7	4.5
Nurse	2.5	4.0	4.6	1.6	2.4	4.3	1.4	2.3	4.2
Research scientist	3.5	2.6	2.4	3.7	2.8	2.7	2.0	2.4	2.4
Other occupation	22.8	21.5	23.3	22.0	18.2	19.5	19.0	16.1	22.6
Undecided	4.3	11.6	10.3	4.1	11.9	11.6	3.7	11.3	11.3

	4-year colleges								
	Private Nonsectarian			Protestant			Catholic		
	1966	1970	1976	1966	1970	1976	1966	1970	1976
Artist (including performer)	7.3	8.6	8.2	6.8	6.6	8.5	7.5	5.8	7.6
Businessman	11.4	7.3	16.0	8.8	9.3	13.9	9.3	11.7	17.7
Clergy or religious worker	0.6	1.3	2.0	2.7	3.2	3.3	2.5	3.1	1.1
Doctor (M.D. or D.D.S.)	8.6	5.7	8.1	5.4	4.9	7.3	5.3	5.4	8.5
Educator (college teacher)	3.4	1.7	0.6	2.0	1.3	0.7	2.3	0.9	0.2
Educator (secondary)	14.0	11.1	4.2	17.0	14.8	6.7	13.7	12.3	3.8
Educator (elementary)	4.8	6.5	3.7	10.5	10.5	6.6	9.7	9.8	5.5
Engineer	3.6	4.6	6.9	3.8	2.6	3.2	3.4	1.8	4.1
Farmer or forester	1.2	1.7	3.0	0.9	1.5	1.8	0.2	0.7	0.7
Health professional (non-M.D.)	3.2	4.9	5.8	3.9	4.6	6.3	4.9	4.2	7.0
Lawyer	6.5	6.3	7.2	4.5	4.5	5.6	5.3	6.6	7.2
Nurse	1.0	1.2	2.0	1.5	2.8	4.9	3.7	6.9	8.9
Research scientist	5.6	3.7	4.3	3.8	2.6	2.2	3.6	2.4	2.2
Other occupation	23.7	19.9	15.7	23.8	17.7	16.3	24.5	16.1	16.0
Undecided	5.1	15.5	18.4	4.7	13.2	12.8	4.0	12.2	9.4

SOURCE. Alexander Astin, et al., *The American Freshman. National Norms for Fall 1966, 1970, 1976* (3 publications).

students characterizing themselves as "Left" and "Liberal" (they declined in number) and those characterizing themselves as "Middle-of-the-road" and "Conservative" (they increased in number). He also finds that students are more traditionally conservative on such issues as capital punishment, the use of force to achieve political ends, busing to achieve the racial integration of public elementary schools, and relaxing standards in admissions and grading. On the other hand, students' attitudes toward the use of marijuana became increasingly tolerant between 1969 and 1975.[1]

The much-rumored and often deplored trend toward increasing concern with financial matters is confirmed in Astin's data. In 1976, 53.1 percent of the freshmen considered it essential to be very well-off financially. On the other hand, in 1966, 53.0 percent considered it essential to be successful in their own businesses, but in 1976, only 45.0 percent felt that way. These changes do not mean that students do not consider themselves altruistic; rather, that that quality no longer ranks as the first concern of the majority. These patterns obtain generally throughout the public and private (sectarian and nonsectarian) sectors.

That this refocusing of values toward job-related concerns is more than whimsy and the temporary aberration of freshmen, but lasts throughout the students' academic careers, is shown in data which indicate the areas in which students have been taking degrees.[2] Since 1970 there have been marked decreases nationwide in the numbers of students earning bachelor's degrees in traditional liberal arts subjects, such as letters, foreign languages, mathematics, education and the social sciences, and marked increases in the numbers of students earning bachelors' degrees in more career-oriented fields, such as business and management, computer and information services, communications, architecture and environmental design, health professions, psychology, and public affairs and services. On the other hand, significant increases also occurred in the field of interdisciplinary studies (again, a somewhat nontraditional major), including general liberal arts, but the number of students taking degrees in that field is relatively small compared to those taking degrees in letters. These trends also prevail throughout the private sector.

One is thus forced to conclude that the traditional liberal arts degree, which is the stock-in-trade of the schools under consideration here, is becoming less popular with students. One might also surmise that private liberal arts colleges, especially Liberal Arts II colleges, are experiencing fluctuating enrollments and are occasionally closing at least in part because of the incompatibility of their curriculums and values with what students desire. In other words, what they offer does not appear to be so much in demand as before.

This conclusion would gain even more credence if private liberal arts colleges were found to be experimenting with their traditional curriculums, for the schools themselves in effect would be admitting this incompatibility between what they offer and what students are attracted to. It turns out, of course, that a considerable amount of tinkering has been occurring. For example, Paul L. Dressel and Frances H. DeLisle, in their *Undergraduate Curriculum Trends*, estimate that between the mid-50's and the mid-60's there was an increase in the number of institutions (in a sample including both private and public 4-year liberal arts colleges and universities) which had course requirements comprising anywhere from 20 to 50 percent of the total number of hours students needed for the bachelor's degree, but at the same time there was a decrease in requirements in English composition, literature, speech, philosophy, religion, and physical education. On the other hand, requirements were increased in foreign languages and mathematics.[3] There was also a trend toward restructuring degree programs to fit the individual student's needs by such means as advanced placement, honors programs, seminars, study abroad programs, tutorials, comprehensive examinations, senior theses, and so on. There were also significant increases in pass/fail and pass/no-credit options.[4] Dressel and DeLisle posit a causal

relationship between these trends and student desires, and observe that just as curriculum changes have always been influenced by student demands, among other things, so they continue to be, though these changes are often rationalized in terms eulogizing "conceptual mastery, . . . independent discovery, development of insight, and broad approaches to problem solving and decisionmaking . . ."[5]

Since the Dressel and DeLisle study, there have been more extensive changes in curriculums. Ron Smith, in "The Composition Requirement Today. A Report on a Nationwide Survey of Four-Year Colleges and Universities," cites the spread of "uniform equivalency testing, true three-year degree programs, the general elimination or streamlining of lower-division requirements, systems approaches, performance or competency-based instruction, open admissions policies, adjustments to booming and then declining enrollments, and even 'accountability.' " Smith's study, based on a random sample of 491 private and public 4-year colleges and universities, indicates that while in 1967 freshmen at 93.2 percent of the schools had to take one or more courses in freshman composition, in 1974 freshmen at only 76 percent had to. Smith also remarks that by 1974, 31 percent of the private schools in his survey had abolished this requirement, though only 11 percent of the public schools had done so. On the other hand, private schools seem to be resisting the trend toward open admissions. only 10 percent of the private schools had adopted such policies for in-state students, whereas 38 percent of the public schools had done so. Citing both financial constraint and student demand, Smith asserts that the reduction of the freshman English requirement, and, by implication, other requirements, will probably spread.[6]

Along with a general reduction of requirements in traditional liberal arts subjects has gone an expansion of courses and program offerings. Bowen and Minter found in 1976 that there were 10 times as many additions and expansions of program in private liberal arts colleges as there were deletions and contractions. They also discovered that between 1969–70 and 1975–76 the average number of courses offered rose significantly throughout the private sector, the number in Liberal Arts I colleges growing by 33 percent and in Liberal Arts II colleges by 20 percent.[7] This development reflects the willingness and the ability of some private liberal arts colleges to change in response to the increasing diversity of students' interests and concerns, it partly reflects advances in some fields that to some degree necessitate new course offerings, and it to some degree reflects the necessity of changing in order to survive.

This expansion in course offerings, at a rate far greater than the rate of expansion in enrollments, occurred in most academic departments in the private sector in general.[8] Very little expansion occurred in the discipline Bowen and Minter call Language and Literature, in which, as was noted above, students seem increasingly uninterested and in which requirements are being abolished. But significant increases in course offerings occurred in such fields as business and accounting, education, engineering, and physical education. Moderate but marked increases also occurred in the natural sciences and in some of the social sciences. Curiously, especially notable increases occurred in the fine arts, namely, music, speech and drama, and dance. In short, over 1/3 of the institutions in the Bowen-Minter sample increased their total course offerings by between 11 and 30 courses, and another 1/3 increased theirs by 31 to 60 courses.[9]

Bowen and Minter also confirm for private liberal arts colleges another trend that Dressel and DeLisle noted with respect to higher education curriculum change in general, namely, a significant increase in the individual student's program and curriculum options as well as in teaching innovation.[10] In addition, private liberal arts colleges have dramatically increased their student services—career counseling, career placement, programs for women, psychological counseling, health services, and, to a lesser degree, programs for minorities.[11] These

developments indicate that some private liberal arts colleges are apparently changing to accommodate new student interests.

In sum, then, one might reasonably conclude that schools are adopting numerous practices partly in order to attract and keep students who are being increasingly attracted to public institutions. (As Bowen and Minter point out, the attrition rate is high at Liberal Arts II colleges, amounting to 20 percent.[12]) They are surprised that private liberal arts colleges demonstrate so high a degree of innovation and flexibility in program offerings, feeling that such experimentation is incompatible with financial distress.[13] But experimentation with curriculums is precisely what might be expected in institutions that are attempting to forestall declining enrollments. In other words, departments might increase their course offerings in disciplines in which students were not interested. Moreover, in some departments it is the practice to introduce new courses, such as special topics courses, which can have vastly different contents from semester to semester and from teacher to teacher, in order to respond quickly to student interests; thus the number of new courses being offered might in fact be much higher than the data indicate. On the other hand, courses usually are not offered very long if their enrollments are low.

Since there are many reasons that the number of course and program offerings might increase, one must be cautious in ascribing increases to any particular cause unless one knows each school's motivation. All that can safely be said is that the number of course and program offerings has grown greatly and that this growth is a sign of response to student attitudes. Of course, conclusions about the financial condition of schools based on these phenomena are unwarranted.

There is some recent evidence to suggest that this trend may be abating somewhat. A number of institutions, public and private, have recently reinstated some traditional liberal arts requirements. Malcolm G. Scully, writing in *The Chronicle of Higher Education*, suggests that the motives for returning to the traditional core curriculum are in some cases philosophical, in others practical. For example, Steven Muller, president of the Johns Hopkins University, has complained that without a background in the more traditional liberal arts disciplines, college graduates are "highly technical and highly skilled," but at the same time they are "literally barbarians." Others argue that though required core courses may not certify a student for his first job after college, they may make him a more attractive candidate for subsequent jobs. If this trend continues, it may help private liberal arts colleges to retard the rate at which their enrollments have been leveling or declining.[14]

CHAPTER III.—NOTES

1. Martin Trow. *Aspects of American Higher Education, 1969–75*. Berkeley. The Carnegie Council on Policy Studies in Higher Education, 1977, pp. 17–22.
2. *Earned Degrees Conferrred, 1973–74*. Washington: DHEW/NCES, 1976, pp. 5–7.
3. Paul L. Dressel and Frances H. DeLisle. *Undergraduate Curriculum Trends*. Washington. American Council on Education, 1969, pp. 25–26, 30.
4. Dressel and DeLisle, p. 44.
5. Dressel and DeLisle, pp. 4, 72.
6. Ron Smith. "The Composition Requirement Today. A Report on a Nationwide Survey of Four Year Colleges and Universities," *College Composition and Communication*, 25 (May 1974), pp. 139–41, 148.
7. Bowen and Minter (1976), p. 31.
8. Bowen and Minter (1976), p. 50.
9. Bowen and Minter (1976), p. 51.
10. Bowen and Minter (1976), p. 52.
11. Bowen and Minter (1976), p. 40.
12. Bowen and Minter (1976), p. 42.
13. Bowen and Minter (1976), p. 17.
14. Malcolm G. Scully. "Many Colleges Re-Appraising Their Undergraduate Curricula," *The Chronicle of Higher Education*, February 7, 1977, pp. 1, 10.

CHAPTER IV

Faculty and Staff

It has been aptly stated that colleges' "primary resources lie in the qualifications and abilities of their faculty. Largely in consequence, most academic personnel policies—including tenure systems, sabbaticals, support for attendance at professional meetings, and strictures that faculty hold doctoral degrees and engage in continuing scholarly endeavors—are designed to establish and maintain high levels of faculty competence."[1] A profile of faculty and staff thus requires that such subjects be considered. Other subjects of importance in considering the faculty in private liberal arts colleges are workloads, affirmative action achievements, support services, and compensation. In general, the available data on these matters (of which there are unfortunately far too little) show that faculty in private liberal arts colleges are fairly typical of faculty in other sectors of higher education. But there are some important ways in which they differ from their peers. For example, private liberal arts college faculty seem to devote more time and attention to students than do their colleagues elsewhere. (This trait is said to be one of the major attractions of private liberal arts colleges.) In addition, faculty at private liberal arts colleges are generally more qualified but less active in research than their colleagues. On an economic basis, though, they fare less well than administrators and are in general compensated less than faculty in other sectors. The data also reveal, not surprisingly, that Liberal Arts I colleges provide better benefits and have more highly qualified faculty than do Liberal Arts II colleges.

One of the most obvious characteristics of the professoriate in general is that it is aging. Alan E. Bayer reports that in 1972-73, 60 percent were over 40 years old, while Allan Cartter has estimated that by 1990 the average age will be 48. AAUP data for 1975–76 confirm this trend.[2] The aging of the faculty reflects the decline in the number of new teaching positions and the consequently infrequent infusion of new blood, as well as the relative lack of mobility in the profession due to the glut of Ph. D.'s in numerous fields, the slowdown in enrollment growth rates in many institutions, and economic constraints against expansion. Because of the sharp decline in academic job opportunities, the proportion of faculty in the upper two ranks has increased from 48.7 percent in 1969–70 to 57.0 percent in 1975–76.[3]

At the same time, the proportion of faculty with tenure has also increased: according to AAUP 60 percent of all faculty were tenured in 1974–75; the National Center for Education Statistics reports that in 1976–77 58.5 percent of the faculty were tenured.[4] But Bowen and Minter found that at Liberal Arts I colleges 64 percent of the faculty were tenured in 1975–76, while only 49 percent were at Liberal Arts II colleges.[5] Since a lower percentage of tenured faculty is generally taken to mean that an institution has greater flexibility in responding to changing needs, then theoretically Liberal Arts II colleges enjoy in this respect a more enviable position than do Liberal Arts I colleges.

Notwithstanding affirmative action goals, the status of faculty women has not appreciably changed in several years. Thus, according to Bayer, the proportion of faculty members who are women did not substantially increase between 1968–69 and 1972-73; data from AAUP indicate that in private liberal arts colleges the same trend continued through 1974–75 and 1975–76.[6] On the other hand, Allan M. Cartter has noted that women job candidates now do as well as men, and Everett Carll Ladd, Jr., and Seymour Martin Lipset observe that the

percentage of faculty under 30 who are women is higher than the percentage of graduate students who are women.[7] Proportionally, almost 50 percent more men than women were tenured. AAUP data show further that in religiously affiliated liberal arts colleges awarding mainly the bachelor's degree there was curiously a great reduction in the proportion of women at the instructor rank but not a corresponding increase in the proportion of women at higher ranks.[8] On the other hand, Bayer also notes that between 1968–69 and 1972–73, the proportion of faculty who are Black increased from 2.2 to 2.9 percent; data for subsequent years are unavailable.[9]

In terms of academic training, faculty at private liberal arts colleges appear to be more qualified than their peers elsewhere. The proportion of all faculty holding the doctorate in 1972–73 was one-third, but at Liberal Arts I colleges it was 55.7 percent, while at Liberal Arts II colleges it was 45 percent. By far the largest proportion of college faculty specialize in liberal arts fields; at Liberal Arts I colleges the proportion was 66.5 percent, though at Liberal Arts II colleges it was only 59.0 percent. That 25.1 percent of Liberal Arts II colleges faculty in 1972–73 taught in career-related fields, while at Liberal Arts I colleges only 14.0 percent did, reveals much about the differences between these types of schools.

With respect to research and scholarship, private liberal arts college faculty on the average are less active than others. Only 12.6 percent of the faculty in Liberal Arts II colleges, vis-á-vis roughly 33 percent nationwide, spent 9 or more hours a week in research in 1972–73, and faculties at both Liberal Arts I and II colleges had fewer recent publications than the national average. On the other hand, more Liberal Arts I faculty than the national average of 25 percent had taken a sabbatical.[10] But the significance of this last criterion should be assessed cautiously, since taking a sabbatical is a matter often more in the hands of the institution than of the faculty member. Martin Trow reports that nationwide the disposition of faculty members toward research and publication is increasingly favorable, perhaps due to the less politically volatile atmosphere on campuses as well as the tight job market in academe, which is leading to an increasingly competitive environment.[11]

A major difference between private liberal arts colleges and other institutions, and one of their most advertised characteristics, is that more of their faculty were what might be called "student-oriented." They spent more time socializing with their students than did their peers in other sectors and they strongly encouraged their students to see them outside of class. Perhaps this trait in some sense counterbalances their relatively lower level of research activity. Three-fourths of these teachers believed that student evaluations should play a role in awarding faculty promotions; almost as many felt that students should be represented on institutions' governing boards. A higher proportion than the national average felt that it was of major importance for them to develop the student's emotional well-being, self-understanding, moral character, and sense of civic responsibility. But fewer faculty than the national average felt that it was essential to prepare their students for later employment and to provide the local community with skilled workers (the proportion of Liberal Arts II college faculty feeling that these matters were important was almost 50 percent greater than that of Liberal Arts I college faculty).[12] (For a discussion of faculty attitudes nationwide, see Martin Trow.)

The two main ways for colleges to control expenses are to increase productivity, or workloads, and to decrease compensation, both of which methods have been employed recently in most schools. The available data suggest that, except for faculty at 2-year colleges, faculty in private liberal arts colleges have the heaviest workloads in the Nation. According to Elaine El-Khawas, the proportion of instructors teaching three or more courses in 1972-73 was the highest at Liberal Arts I colleges, where 79.8 percent of them had such a load; 73.2 percent of the faculty at Liberal Arts II colleges had a similar load. This workload was slightly

reduced by teaching assistants, but fewer faculty enjoyed this beneficence at Liberal Arts II colleges than at Liberal Arts I colleges. About half of the faculty nationwide, as well as in private liberal arts colleges, spent 5 or more hours a week in academic advising.[13] Bowen and Minter found that between 1969–70 and 1975–76, the student/faculty ratio in the private sector grew by 1.9 percent. But at Liberal Arts I colleges it rose by 4.3 percent (or from 14.0 to 14.6 students per instructor) in just the year between 1974–75 and 1975–76; at Liberal Arts II colleges it rose even more by 6.1 percent (or from 14.7 to 15.6 students per instructor). This increase may have been effected by simply closing those courses with very small enrollments, rather than increasing the enrollments in each course. Nevertheless, the end result is the same: a saving of money. On the other hand, they also found that during the same period there was little change in the level of supporting services for faculty (secretarial help, research assistance, and travel allowances).[14]

Not only are workloads in private liberal arts colleges among the heaviest, compensation is almost the least. Increases in compensation for all faculty have not kept pace with increases in the Consumer Price Index, not to mention increases in the Higher Living Standard, since 1972-73.[15] Nor, between 1971-72 and 1973-74, did compensation for faculty members even keep up with compensation for other workers in the whole society (not including agricultural workers). Since 1973-74, it has increased comparably with that for other workers but still has not recovered the ground lost earlier. The plight of faculty in private liberal arts colleges is worse. AAUP data indicate that on the average they earn considerably less than faculty in public and private universities generally.[16] Recent NCES data indicate, however, that in 1976–77 faculty at private institutions received proportionately greater increases in salary than did faculty in public institutions. Increases in salaries again failed to match the increase in the cost of living. On the average, salaries increased more slowly than at anytime since 1972-73.[17] Women faculty members have earned and continue to earn less than men in all ranks and in all sectors. on the average, women's compensation in 1974–75 was 17.5 percent less than men's in the same institutions. NCES data for 1975-76 show this trend continuing, though women received, on the average, slightly greater increases in salary than did men.[18] The reasons for this disparity are that more women than men teach in low-paying institutions, women are concentrated in the lower ranks, and women are usually simply paid less than men at the same rank. The differences in compensation between men and women are greatest in universities and least in 2-year colleges. Robert Dorfman observes, "differentials tend to grow as scholarly demands increase."[19] Bowen and Minter assert that the overall decline in faculty compensation "is the most significant 'saving' or 'retrenchment' " that the private sector has made.[20]

Some faculties have responded to these trends by seeking collective bargaining rights. Bowen and Minter found that in 1976 only four institutions in their sample had collective bargaining arrangements with their faculty, though 20 percent had them with trade, technical, and other nonacademic employees.[21] But according to the Education Commission of the States, in 1968 about 10,000 faculty members, mostly in junior, community, and vocational institutions, had collective bargaining arrangements; by 1976 more than 117,000 faculty and other staff of 450 institutions, some of which were religiously affiliated, had them.[22] Noting that "in the private sector *in the 39 years* that have elapsed since the passage of the Wagner Act, over *one-third* of the labor force has become unionized, while in all levels of public education . . . almost but not quite that same fraction has taken a union-line stance *in one decade*, . . ." the Commission predicted that the practice will spread far beyond the 21 States in which it existed in 1974.[23] It should be noted that faculties do not always opt for collective bargaining for financial motives: sometimes the issues include working conditions or matters of institutional governance, for example.

Information concerning administrative staffs is even more incomplete than that concerning faculty, but available data suggest that in all sectors they have increased in size more rapidly than have faculty.[24] Administration expenses are also high, especially in private liberal arts colleges. Robert Dorfman and Donald C. Cell claim that liberal arts colleges spend "about a third of their current education budgets on administration, as compared to just 10 percent by the typical research university." Part of this burden, they point out, is due to increases in reporting to governmental and other agencies.[25] Increases in pay for administrators, clerical staff, and other nonacademic staff were generally greater than for faculty between 1973–74 and 1975–76. The differences were even greater at Liberal Arts II colleges than at Liberal Arts I colleges.[26]

CHAPTER IV.—NOTES

1. Elaine H. El-Khawas. *Report on a Study of the Private Sector of Higher Education to the United States Office of Education* (U.S. Office of Education Contract No. 300-75-0375). Washington, 1976, pp. 19-20.
2. Alan E. Bayer. *Teaching Faculty in Academe.* Washington. American Council on Education, 1973, p. i, Everett Carll Ladd, Jr., and Seymour Martin Lipset. "The Aging Professoriate," *Chronicle of Higher Education*, May 24, 1976, p. 16; Robert Dorfman and Donald C. Cell. Nearly Keeping Up. Report on the Economic Status of the Profession, 1975–76," *AAUP Bulletin*, 62, no. 2 (Summer 1976), p. 199.
3. Dorfman and Cell, p. 200.
4. Robert Dorfman. "Two Steps Backward. Report on the Economic Status of the Profession, 1974–75," *AAUP Bulletin*, 61, no. 2 (Summer 1975), p. 130, *Selected Statistics on Salaries and Tenure of Full Time Instructional Faculty.* Washington: DHEW/NCES, April 19, 1977, p. 2. Data are for faculty on 9-month contracts only.
5. Bowen and Minter (1976), p. 25.
6. Bayer, p. i; Dorfman and Cell, p. 26.
7. Ladd and Lipset. "Sex Differences in Academe," *Chronicle of Higher Education*, May 10, 1976, p. 18.
8. Dorfman and Cell, p. 26.
9. Bayer, p. i.
10. El-Khawas (*Report*), pp. 73, 79.
11. Trow, pp. 9, 10, 26.
12. El-Khawas (*Report*), pp. 78–80.
13. El-Khawas (*Report*), p. 81.
14. Bowen and Minter (1976), pp. 19, 20, 22, 25–27.
15. Peter O. Steiner, Maryse Eymonerie, and William B. Woolf. "At the Brink. Report on the Economic Status of the Profession, 1970–71," *AAUP Bulletin*, 57, no. 2 (Summer 1971), pp. 226–227, Dorfman, pp. 126–127, 129; Dorfman and Cell, pp. 210, 212, 214; Bowen and Minter (1976), p. 19.
16. Dorfman and Cell, p. 203.
17. Ellen K. Coughlin. "Three Economic Indicators for U.S. Higher Education," *Chronicle of Higher Education*, May 2, 1977, p. 5.
18. Coughlin, p. 5.
19. Dorfman, p. 122; Dorfman and Cell, p. 221.
20. Bowen and Minter (1976), p. 22.
21. Bowen and Minter (1976), pp. 26–28.
22. *Higher Education and National Affairs*, March 18, 1977, p. 6.
23. Education Commission of the States. *Collective Bargaining in Postsecondary Educational Institutions*, Report no. 45 (Denver, March 1974), pp. 2-4.
24. Bowen and Minter (1976), pp. 27–28.
25. Dorfman and Cell, p. 9.
26. Bowen and Minter (1976), pp. 28–29.

CHAPTER V

Finances

This chapter focuses on financial trends in private liberal arts colleges as revealed by a study of aggregate HEGIS data. The analysis is divided into four main parts: I. The Current Fund Account; II. The Education and General Account; III. The Student Aid Account; and IV. The Auxiliary Enterprises and Major Service Programs Accounts. Since many of the definitions of the HEGIS financial categories were changed in the 1974–75 HEGIS forms, the most recent complete and comparable data that are available for analysis are for 1973–74 (a few data items are comparable for 1974–75). For private liberal arts colleges, the data are available back to only 1971–72, though for the public and private sectors in general, data back to 1965–66 are presented.[1]

A. The Current Fund Account

The Current Fund Account represents the total revenues and expenditures of the insititution. It includes, as subaccounts, the Education and General Account, the Student Aid Account, the Major Service Programs Account, and the Auxiliary Enterprises Account.

Aggregate current fund data, presented in detail in appendix tables 11 through 14, reveal that the public sector appears to enjoy the most favorable financial position. Revenues exceeded expenditures in public institutions in all years shown—1965–66, 1970–71, and 1973–74. However, the data also suggest that expenditures are catching up to revenues, or approaching equilibrium.

The situation of the private sector seems less fortunate—in 1965–66 and 1970–71, expenditures actually exceeded revenues, so it would appear that in those years the private sector experienced a deficit. In 1973–74 and 1974–75, the situation in the private sector seems to have improved slightly, but revenues and expenditures were almost exactly balanced, with revenues outpacing expenditures by the uncomfortably small margin of only 1 percent.

For the period 1971–72 through 1974–75, current fund revenues exceeded expenditures at Liberal Arts I colleges, but at Liberal Arts II schools, expenditures exceeded revenues in 1974–75. On the basis of these aggregate data, then, it would appear that Liberal Arts II colleges as a whole may have experienced a deficit in 1974–75.

Table 22, following, shows the margin by which revenues exceeded expenditures for selected years. The negative figures indicate the margin by which expenditures exceeded revenues. The table reveals that there would appear to have been a decline in the situation of the public sector, though revenues exceeded expenditures in that sector by twice as much as in the private sector. In the private sector as a whole, it appears that revenues were beginning to outpace expenditures after 1970–71, though not by much. There would also appear to be some decline in the position of Liberal Arts I colleges, though no solid trends appear to be present. In Liberal Arts II colleges, however, there appears to be a definite trend toward a narrowing of the margin between revenues and expenditures; in fact, it seems that a deficit occurred in 1974–75. This table also indicates that Liberal Arts I colleges seem to be faring somewhat better in the short run than Liberal Arts II colleges; but compared to the entire private sector, they seem to have a slighter advantage.

It is somewhat risky to leap to the conclusion from these data that any particular sector experienced real deficits, however. Not only do HEGIS data not take into account such sources of funds as carryover into a year of the previous year's unused balance, and depreciation of facilities and equip-

TABLE 22.—Percentages by Which Current Fund Revenues Exceed Current Fund Expenditures For All Institutions of Higher Education, By Control, and For Liberal Arts I and II Colleges, By Classification: United States, 1965-66 to 1974-75

[In percent]

Year	Public	Private	Liberal arts I colleges	Liberal arts II colleges
1965–66.....	4.0	−1.0	0.1	1.4
1970–71.....	3.5	−.3	.8	1.3
1973–74.....	4.3	1.2	1.4	.6
1974–75.....	2.2	1.0	.5	−.1

SOURCES: Analysis of the EDSTAT Systems HEGIS tapes for 1966, 1971, 1974, and 1975; DHEW/NCES *Digest of Education Statistics* for the same years.

ment, but, as Bowen and Minter point out, schools frequently declare deficits at the same time that "they have been drawing down capital by providing inadequate reserves." [2] In addition, Jellema believes that "in some instances an institution ought to run a current fund deficit," though it ought to be "planned." [3]

Thus, even when an institution actually runs a current fund deficit, it may not necessarily be a bad sign. Also, since the data are in aggregate form, the situation at individual institutions might be far different from that of the sector in total.

However, Bowen and Minter, on the basis of data gathered from 100 private institutions, arrived at the conclusion that Liberal Arts II institutions were in a more difficult situation than other groups of institutions. According to them, much of the difficulty of Liberal Arts II colleges is attributable to the problem of inflation.[4] Inflation has, of course, affected the finances of all institutions, for ever-rising costs have prevented them from substantially increasing expenditures in a number of important areas, particularly instruction and departmental research. But Liberal Arts II institutions appear to have been more severely affected by inflationary pressures than have many other more affluent institutions.

Another major factor contributing to the difficulties of private liberal arts colleges is their heavy reliance upon tuition and fees for operating capital (see below). This reliance upon student charges means that enrollment declines have a severe impact upon revenues and often necessitate increases in tuition and fee charges, which in turn can lead to further enrollment declines, thus perpetuating a cycle.

B. The Education and General Account

The Education and General (E and G) account is the largest subaccount in the current fund account. It consists of revenues from tuition and fees, endowment, government assistance, private gifts and grants, and other sources; on the expenditure side, it consists of disbursements for research, instruction, libraries, plant operations and maintenance, service programs, extension and public services, organized activities related to educational departments, and other sponsored programs.

The E and G account has historically comprised the largest part of the current fund account in all sectors of the higher education community. For example, as appendix tables 11–14 indicate, E and G revenues comprised around 80 percent of all current fund revenues in the public sector between 1965–66 and 1973–74. E and G expenditures in the public sector likewise comprised around 80 percent of all current fund expenditures during the same period.

In the private sector, E and G revenues comprised a slightly smaller proportion of total current fund revenues—72 percent between 1965–66 and 1973–74. E and G expenditures in the private sector constituted a similar portion of current fund expenditures. Thus the private sector, notwithstanding its heavy reliance on tuition and fees, had an E and G account about 10 percent smaller, in proportion to current funds, than did the public sector. Consequently, it had to rely more than the public sector on income from sources outside the E and G account, particularly auxiliary enterprises and student aid grants.

The situation with respect to private liberal arts colleges is identical to that of

the private sector as a whole. the E and G account represents about 72 percent of the current fund account, on both the revenue and expenditure sides, and appears to have done so consistently for the years for which data are available.

1. Education and General Revenues

Table 23, which shows the percentage by which E and G revenues exceeded expenditures for selected years, indicates that revenues outpaced expenditures in all sectors for the years shown. It appears that the margin between E and G revenues and expenditures has steadily increased in the public and private sectors as a whole. It also seems that there was a steady increase in the margin at Liberal Arts I colleges, though at Liberal Arts II colleges the increase was erratic. The largest margin between revenues and expenditures is to be found at Liberal Arts I institutions, and the smallest at Liberal Arts II institutions.

The reasons for the sizable surpluses in the E and G account will become clear as the discussion proceeds. Suffice it to say at this point that, in general, institutions of higher education in both the public and private sectors have increased the proportion of E and G revenues accounted for by tuition and fees, while greatly reducing the proportion of expenditures constituted by research and extension and public service.

TABLE 23.—Percentages By Which E And G Revenues Exceed E and G Expenditures For all Institutions of Higher Education, By Control, and For Liberal Arts I and II Colleges, By Classification: United States, 1965-66 to 1973-74

[In percent]

Year	Public	Private	Liberal arts I colleges	Liberal arts II colleges
1965-66	4.3	1.9	NA	NA
1970-71	5.1	3.1	NA	NA
1971-72	5.5	4.7	5.6	4.7
1972-73	5.0	4.7	7.5	5.5
1973-74	6.0	5.6	8.5	5.1

SOURCES: Analysis of the EDSTAT System's HEGIS Tapes for 1966, 1971, 1972, 1973, and 1974; DHEW/NCES *Digest of Education Statistics* for the same years.

Private liberal arts colleges have reduced expenditures in a similar fashion as well as reducing the proportion to total E and G revenues accounted for by tuition and fees. These practices have resulted in substantial savings to the institutions. Surpluses have been necessary in the E and G account in order to offset the sizable deficits in the student aid account in all sectors, as will be seen below. It is interesting to note that Liberal Arts I institutions have the largest surpluses in the E and G account and the largest expenses for student aid.

Table 24 reveals the roles played by various categories of E and G revenues in proportion to total E and G revenues.

This table shows that, with a few significant exceptions, there was little change in the proportionate roles played by the various sources of E and G income in relation to total E and G revenues. However, the following trends appear to exist. The role of tuition and fees diminished slightly in importance in private liberal arts colleges, though it increased in the public and private sectors generally. The diminished role of tuition and fees at private liberal arts colleges reflects their efforts to remain competitive with other sectors in attracting students.

The role of private gifts and grants was only very gradually augmented in private liberal arts colleges and in private institutions as a whole, despite vigorous fundraising efforts on their parts; it held steady in the public sector.

Similarly, the role of endowment appears to have increased in importance only minutely in private liberal arts colleges, while its importance remained more constant in public and private institutions generally.

The role played by other E and G revenues (income from outside organizations for research, training programs, workshops, and the like) grew to some degree in all sectors, but most significantly in the private.

These increases were necessary to offset the large decline in the proportion to total E and G revenues accounted for by income from the Federal Government. In both the public and private sectors the proportionate role of income from Federal sources dimin-

TABLE 24.—Sources of Education and General Revenues for All Institutions of Higher Education, by Control, and for Liberal Arts I and II Colleges: United States, 1965–66 to 1973–74

[In percent]

	Tuition and fees	Private gifts and grants	Endowment	Other education and general	Federal sources	State sources	Local sources
Liberal arts I and II:							
1965–66	65.9	17.3	7.6	3.5	5.6	0.01	0.00
1970–71	68.4	16.3	6.4	4.5	4.6	0.00	0.00
1971–72	68.3	15.9	6.2	3.9	5.0	0.6	0.04
1972–73	67.1	16.1	6.2	4.6	5.4	0.6	0.1
1973–74	65.7	16.4	6.5	4.8	5.6	0.9	0.1
All private:							
1965–66	42.5	11.3	6.7	7.1	30.2	2.0	0.2
1970–71	49.4	13.2	6.8	11.0	16.7	1.9	1.0
1971–72	49.5	13.4	6.5	11.2	16.4	2.3	0.7
1972–73	49.8	13.2	6.4	11.1	16.1	2.5	0.9
1973–74	49.6	13.2	6.6	11.5	15.3	2.9	0.9
All public:							
1965–66	14.1	2.6	0.5	6.6	22.6	48.4	5.1
1970–71	16.5	2.4	0.4	7.4	14.7	51.8	6.9
1971–72	17.1	2.4	0.4	7.1	14.8	51.2	6.9
1972–73	16.7	2.5	0.4	7.1	15.0	51.2	7.1
1973–74	16.0	2.5	0.5	7.5	13.9	52.6	7.0

SOURCES. American Council on Education (ACE) estimates using HEGIS data for 1966 and 1971; Analysis of the EDSTAT System's HEGIS tapes for 1972, 1973, and 1974, DHEW/NCES *Digest of Education Statistics* for 1972, 1973, and 1974.

ished sharply, largely due to reductions during the late 1960's and early 1970's in the amount of money the Federal Government expended for research in the areas of defense and space exploration. Largely because their research capacity was so small to start with, private liberal arts colleges were not severely affected by these cutbacks; they could even be said to have been helped by them, since they contributed to the factors forcing other institutions to raise their charges to students. At Liberal Arts II colleges, the proportionate role of income from the Federal government actually increased slightly.

The importance of the role of income from State and local governments increased very slightly at private liberal arts colleges, though it was still minute as of 1973–74. It also increased somewhat in the private sector generally. In the public sector, however, significant increases in the level of income from State and local governments enabled it to recoup some of its losses from the reduction in the proportion of Federal research funds.

At this point the analysis turns to a more detailed consideration of the various categories of E and G revenues. This discussion, based largely on the current fund tables found in the appendix (appendix tables 11 through 14), presents selected categories of E and G revenue in the order of the size of the role they play in the total E and G revenues of private liberal arts colleges.

a. Tuition and Fees

As table 24 indicates, tuition and fees played the largest, but gradually decreasing, role in Liberal Arts I and II colleges, where in 1974–75 they were about two-thirds of total E and G income. By the same year, tuition and fees had increased to about one-half of total E and G income in the private sector and to about one-sixth in the public sector.

Tuition and fee revenues per student enrolled dramatize the unique financial

situation of private liberal arts colleges. In the public sector, tuition and fee revenues per student were $450 in 1974–75, while in the private sector they were much higher—$1,901 in 1974–75. At Liberal Arts I colleges, they were almost six times higher than in the public sector—$2,510 in 1974–75—while at Liberal Arts II colleges they were slightly less than the average for the entire private sector—$1,701 in 1974–75.

Though these figures suggest that tuition and fees were less important in Liberal Arts II colleges than in the private sector as a whole, it must be remembered that tuition and fees played a larger proportional role in the total E and G revenues of Liberal Arts II institutions than they did in the public sector generally.

These figures highlight the extreme dependence of private liberal arts colleges on tuition and fees for operating capital. These schools are therefore the most dependent institutions upon enrollments. Consequently, when enrollments decline, as they very well may if present demographic trends continue unabated and other sources of students are not tapped, or private institutions do not economize wisely, liberal arts colleges will be among the most severely affected institutions. It is thus easy to understand why many of these schools have altered their traditional curriculums and practices governing student life, as well as incurring large deficits in student aid (see below).

b. Private Gifts and Grants

The second largest source of E and G income for private liberal arts colleges, as table 24 shows, was private gifts and grants. Recent preliminary data from NCES indicate that voluntary support for colleges and universities rose in 1975–76 by more than 11 percent, the greatest increases in a decade. Private institutions, according to this information, showed larger increases in contributions than did public institutions for the first time since 1968–69.

As of 1973–74, the latest year for which comparable data are available, private gifts and grants had only slowly increased, despite vigorous fundraising campaigns, to just one-sixth of total E and G revenues at private liberal arts colleges. In comparison, private gifts and grants in the private sector as a whole amounted to one-eighth of total E and G revenues. In the public sector they were a minute one-fiftieth.

On the basis of private gifts and grants income per student, the private sector by far surpassed the public sector. For example, private gifts and grants per student enrolled amounted to $453 at private liberal arts colleges in 1973–74, while in the private sector overall they were slightly higher—$470. In the public sector they were only $67.

The financial situation of private liberal arts colleges is thus doubly difficult. Not only can these institutions not afford to alienate many students (clients), upon whom they are severely dependent for operating capital, they are also subject, for their second largest source of funds, to the whims of donors, setbacks in the economy which could prevent potential donors from contributing, and changes in tax laws which could reduce the incentives for charitable contributions.

c. Endowment

Endowment earnings are especially important sources of revenue in the private sector, though their significance varies considerably from institution to institution. Income from endowment funds amounted to nearly $577 million in 1973–74; private institutions in general accounted for 87 percent of that total, while private liberal arts colleges accounted for 20 percent.

Table 24 reveals that endowment earnings in private liberal arts colleges comprised 6.5 percent of total E and G revenues in 1973–74, despite intense endowment fund drives. This proportion is down from 7.6 percent in 1965–66. Endowment income in the private sector as a whole was 6.6 percent in 1973–74 (essentially unchanged from 1965–66), while in public institutions it was negligible—only .5 percent, as it has been throughout the period.

Endowment earnings per student enrolled are particularly striking. In the public

sector, endowment earnings were only $12 per student in 1973–74, while in the private sector they were 20 times higher—$235. In Liberal Arts II colleges, they were only $82 in 1973–74, or about 7 times more than in the public sector. But in Liberal Arts I colleges, they were $416, or 35 times greater than in public institutions.

This disparity possibly reflects differences in business success at different kinds of colleges, as well as the possibly greater financial resources and sense of community of alumni from different colleges who contribute to endowment fund drives.

Endowment income has its own advantages and disadvantages. On the one hand, it provides the institution with funds that are often unencumbered and can be expended in accordance with institutional priorities. On the other hand, the heavier the dependence upon endowment the more perilous an institution's finances during periods of economic uncertainty, such as the last half dozen years have seen. Thus, not only are investments affected, but so too are contributions to endowment funds.

d. Other E and G

The fourth largest source of E and G revenues for private liberal arts colleges, as table 24 indicates, is Other E and G income, consisting of revenue from outside organizations for research, training programs, workshops, and the like. For private liberal arts colleges, Other E and G income gradually increased in proportion to total E and G revenues between 1971–72 and 1973–74, so that in the latter year it accounted for nearly 5 percent of E and G income.

Because of their generally greater research capabilities and visibility, however, public and private institutions as a whole generally fared better than private liberal arts colleges in acquiring Other E and G income. In the private sector as a whole, Other E and G revenues comprised almost 12 percent of total E and G income, while in the public sector they accounted for about 8 percent.

Other E and G income per student highlights the greater difficulties that private liberal arts colleges have in attracting income from these sources. In 1973–74, Other E and G revenues in Liberal Arts I colleges had risen to $171 per student, while in Liberal Arts II colleges they had climbed to $117. In the public sector they had risen to $200 per student in 1973–74. In the private sector as a whole, however, they had climbed to $410 per student. The extremely high figure in the private sector is probably due to the ability of a few prestigious, major research universities to acquire funds from these sources for research-oriented activities.

e. Income from the Federal Government

The fifth largest source of E and G income for private liberal arts colleges, as table 24 reveals, is income from the Federal Government in the form of support for sponsored programs and research. Table 24 indicates that income from the Federal Government for private liberal arts colleges hovered around 5 percent between 1965–66 and 1973–74.

In the private sector as a whole, however, income from Federal sources declined from 30 percent of E and G revenues in 1965–66 to 15 percent in 1973–74, a figure that is still triple the proportion in private liberal arts colleges. In the public sector, the decrease was less dramatic, but significant nonetheless: between 1965–66 and 1973–74, income from Federal sources declined from 23 percent of E and G income to 14 percent, again still three times the level in private liberal arts colleges. As was noted above, these decreases appear largely due to reductions in Federal research support in the areas of defense and space exploration. Since private liberal arts colleges have little research capabilities in these areas, they were not severely hurt by these cutbacks.

As was the case with Other E and G income, private institutions in general have the largest income from Federal sources on a per student basis. In 1973–74, revenues from Federal sources amounted to $543 per student in the private sector, but only $109 at Liberal Arts I colleges and $175 at

Liberal Arts II institutions. In the public sector, they were $370 per student, still far below that in the private sector. Again, it would appear that a few major research universities have been receiving the major part of the Federal funds going to higher education research in the more specialized and complex technical and scientific areas.

However, in the private sector overall, the actual number of dollars from Federal sources declined by almost 10 percent between 1965–66 and 1973–74. In the public sector and in private liberal arts colleges in particular, on the other hand, the actual number of dollars increased. For every other source of revenue, the number of dollars increased in all sectors, even when, as a proportion of total E and G income, they may have declined. Only with respect to income from Federal sources in the private sector has there been a decline in the actual dollar figure.

f. Income from State and Local Governments

The smallest source of E and G revenue for private liberal arts colleges, as table 24 shows, is income from State and local governments. Though there have been marked increases in the level of support for private liberal arts colleges from these sources, these revenues accounted for about only 1 percent of E and G revenues in these institutions in 1973–74.

At private institutions generally, income from State and local sources had increased slightly to 4 percent in 1973–74. In the public sector, however, the role of income from State and local governments was vastly greater. 60 percent of the E and G income of public institutions derived from these sources.

State and local government income per student enrolled makes this point even more dramatically. In Liberal Arts I colleges, State and local income amounted to $43 per student in 1973–74, while at Liberal Arts II colleges, it was a mere $23. In the private sector as a whole, it was $135 per student. For the public sector, however, it was $1,590 per student.

Herein lies the greatest financial advantage, the significance of which can hardly be overstated, that the public sector has over the private. With well over half of their entire E and G revenues coming from State and local governments, public institutions are both assured of a relatively stable source of most of their E and G income as well as enabled to keep charges to students comparatively low. Private institutions are forced to rely more on less lucrative sources of revenue which are at the same time often more risky. In addition, private institutions, especially private liberal arts colleges, must rely extremely heavily upon tuition and fees, thereby making it quite difficult for them to compete with public institutions for students on the basis of price.

In sum, after tuition and fees, Liberal Arts I colleges depended for E and G revenue to a great and increasing extent on their endowments and then on private gifts and grants; Liberal Arts II colleges depended on tuition and fees first, then on private gifts and grants, and then on endowments. The dependence on tuition and fees was decreasing in private liberal arts colleges, while it was increasing on almost all other sources of E and G income. The Federal Government played a small part, though by far the largest governmental role, in the E and G revenues of private liberal arts colleges, but income from Federal sources appears to be decreasing as a proportion of overall E and G revenues at Liberal Arts I colleges.

2. E and G Expenditures

E and G expenditures consist of disbursements for research, instruction and departmental research, libraries, plant operations and maintenance, service programs, extension and public service, organized activities related to educational departments, and other sponsored programs. Table 25 (below) indicates the size of the role of these categories of expenditures in the total E and G expenditures of public, private, and private liberal arts colleges.

This table shows that the role of each of the seven categories presented has fluc-

TABLE 25.—Purposes of Education and General Expenditures for all Institutions of Higher Education, by Control, and for Liberal Arts I and II Colleges: United States, 1965–66 to 1973–74

[In percent]

	Instruction and departmental research	General administration and general expenses	Plant operations and maintenance	Libraries	Sponsored programs other than research	Sponsored research and other separately budgeted research	Extension and public service and organized activities related to education departments
Liberal arts I and II:							
1965–66	46.6	29.0	12.3	5.3	0.7	3.0	3.0
1970–71	45.0	30.9	13.0	5.2	2.5	1.2	2.0
1971–72	44.5	31.5	12.9	5.1	2.7	1.1	2.1
1972–73	44.2	31.8	13.2	5.1	2.7	1.0	2.1
1973–74	43.9	31.9	13.2	5.0	2.9	1.0	2.1
All private:							
1965–66	33.4	16.4	8.5	3.5	1.3	30.9	6.1
1970–71	39.6	20.5	10.1	4.3	4.8	15.1	5.5
1971–72	39.2	20.9	10.2	4.2	4.9	14.7	5.9
1972–73	39.2	21.4	10.4	4.2	6.1	13.2	5.5
1973–74	39.6	21.6	10.8	4.2	6.0	12.5	5.1
All public:							
1965–66	41.0	12.5	8.5	3.5	1.8	19.8	12.9
1970–71	46.6	15.2	9.7	4.0	5.2	11.2	8.1
1971–72	46.3	15.7	10.0	4.3	5.8	10.4	7.5
1972–73	46.0	15.9	10.1	3.9	6.1	10.5	7.6
1973–74	45.9	16.5	10.7	4.0	5.7	9 8	7.5

SOURCES: American Council on Education (ACE) estimates using HEGIS data for 1966 and 1971; Analysis of the EDSTAT Systems HEGIS tapes for 1966, 1972, 1973, and 1974, DHEW/NCES *Digest of Education Statistics* for 1972, 1973, and 1974.

tuated slightly in all sectors between 1965–66 and 1973–74. In private liberal arts colleges, the roles of Instruction and Departmental Research and Sponsored Research declined slightly but significantly, while there were lesser declines in the roles of Extension and Public Service and organized Activities Related to Educational Departments, and Libraries. There were slight but significant increases in the roles of General Executive and Administration, and Plant Operations and Maintenance expenses. A sizable increase occurred in expenses for Sponsored Programs other than Research.

Thus, it appears that there were decreases in private liberal arts colleges in expenditures for what might be called the traditional concerns of such schools, and corresponding increases in areas more peripheral to those concerns.

With respect to the public and private sectors, table 25 reveals that the relative size of the various categories of expenditures changed considerably. The proportion accounted for by Extension and Public Service and Related Organized Activities in the total E and G expenditures of public institutions was almost halved between 1965–66 and 1973–74. In the private sector, there was only a slight decline in the role played by these expenditures. The role of Sponsored Research and Other Separately Budgeted Research was drastically cut: in the public sector it was reduced by slightly more than half, while in the private sector it was cut by a half to two-thirds. These cuts reflect nearly concomitant losses of revenue for research.

There were substantial increases in the public and private sectors in the relative size of the role of expenditures for Instruction and Departmental Research (in con-

trast to the trend in private liberal arts colleges) and of the role of expenses for General Administration. There was also a substantial increase in both sectors in the proportionate role of Sponsored Programs Other than Research. More modest proportionate increases occurred in the roles of Plant Operations and Maintenance and in Libraries. (In private liberal arts colleges, the role of expenditures for Libraries diminished.)

In sum, there appear to have been increases in the public and private sectors in the proportionate roles of more or less traditional priorities, except for research. Thus, the major trends in private liberal arts colleges appear to be running counter to those in the rest of the higher education community.

At this point the analysis turns to a more detailed consideration of the various categories of E and G expenditures. This discussion, again largely based on the current fund tables (appendix tables 11 through 14), presents selected categories of E and G expenditures in the order of the proportionate role they play in the total E and G expenditures of private liberal arts colleges.

a. Instruction and Departmental Research

As table 25 indicates, the major E and G expenditure in all sectors of higher education is Instruction and Departmental Research. This category of expenditures accounted for around two-fifths of E and G expenses in private liberal arts colleges in 1973–74. In the private sector as a whole, they also accounted for two fifths of E and G expenditures. In the public sector, they accounted for 46 percent of E and G disbursements.

As noted above, Instruction and Departmental Research expenditures were comprising a decreasing proportion of E and G expenditures in private liberal arts colleges. In the private and public sectors generally, however, that proportion increased between 1965–66 and 1973–74. The proportional decrease in expenditures for Instruction and Departmental Research at private liberal arts colleges may have unfortunate consequences for the quality of education that these schools offer. On the other hand, it may reflect superior management and business practices at these institutions.

The decrease in Instruction and Departmental Research expenditures as a proportion of E and G expenditures appears, at least in part, to have been the price paid to permit private liberal arts colleges to increase the proportion of the E and G budget allotted to Plant Operations and Maintenance. Since the lion's share of Instruction and Departmental Research expenses are used for faculty salaries, it may be that private liberal arts colleges believe that if someone must feel a pinch, it is more politic these days to have the faculty feel it (given the glut of Ph.D.'s in the academic job market) than to have students feel it (given the difficulty of attracting them). Thus, while salaries have grown relatively little at private liberal arts colleges, tuition and fee charges have been restrained, and more resources have been expended on the physical facilities of the institutions.

However, the situation is not nearly so grim when Instruction and Departmental Research expenses per student are considered, at least not at Liberal Arts I colleges. In those institutions, Instruction and Departmental Research expenses amounted to $1,515 per student in 1973–74, the highest of all sectors. In Liberal Arts II institutions, however, Instruction and Departmental Research accounted for only $986 per student. This figure is the lowest of all sectors. In comparison, Instruction and Departmental Research expenses per student were $1,356 in the private sector and $1,154 in the public.

On the other hand, the increase in Instruction and Departmental Research expenditures between 1971–72 and 1973–74 was less than the increase in inflation at Liberal Arts I colleges, while it was greater than inflation at Liberal Arts II colleges (see appendix table 15). In the public and private sectors generally, the increases in Instruction and Departmental Research expenditures per student were far greater than the increase in inflation for the 1965–66 through

1973–74 period. Generally, increases less than inflation in this category of expense are considered unfortunate, but the situation varies considerably, of course, from campus to campus.

b. General Administration and General Expenses

The second largest category of expenditures, table 25 indicates, is General Administration and General Expenses (in addition to expenditures for the general executive and administrative offices, this category includes expenditures for services to students, staff benefits, and miscellaneous expenditures for education and general purposes not included in other categories). In private liberal arts colleges, these expenditures increased slightly between 1965–66 and 1973–74 to a high of almost one-third of the total E and G budget.

In the private sector as a whole, these expenditures were also high; between 1965–66 and 1973–74 they increased steadily, consuming about one-fifth of total E and G expenditures in 1973–74. This proportion is considerably lower than that at private liberal arts colleges.

In the public sector as a whole, the proportion is even lower. Here these expenses require only one-sixth of all E and G expenditures, or about half the proportion in private liberal arts colleges.

On a per student basis, the figures are even more dramatic and indicate a potentially serious problem for private liberal arts colleges. In 1973–74, general executive and administration expenses in Liberal Arts I colleges were roughly $1,003 per student, while in Liberal Arts II colleges they were $756. These costs are higher than in the public and private sectors in general.

In public institutions, these expenses were only $415 per student in 1973–74, or less than half as high as in Liberal Arts I colleges. In private institutions overall, these expenses were $729 per student.

These expenses are reflections of increases in salaries of administrative personnel and increases in the costs of complying with various forms of social legislation. According to the American Council on Education, the largest single cause for increases in these expenses was increases in costs for employees' Social Security benefits. In an enterprise that is extremely labor-intensive, that is, having a great number of employees relative to the "product" turned out, it would appear to be extremely difficult to bring these expenditures under control.

c. Plant Operations and Maintenance

As table 25 shows, the third highest expenditure for private liberal arts colleges, and another of their major burdens, is Plant Operations and Maintenance expenditures, which required about one-eighth of their total E and G expenditures in 1973–74. In both the public and private sectors in general, this expenditure accounted for about only one-tenth of total E and G expenditures.

In Liberal Arts I colleges, Plant Operations and Maintenance expenditures rose 12 percent between 1971–72 and 1973–74, while in Liberal Arts II colleges, they rose almost 60 percent. This rate of increase is clearly a major problem of Liberal Arts II colleges.

On a per student basis, private institutions appear to be in a far less fortunate position than public institutions. Liberal Arts I colleges had the highest per student costs for Plant Operations and Maintenance—$444 in 1973–74. At Liberal Arts II colleges, it was $302, but rising very fast. In the private sector overall, expenses were $365 per student in 1973–74, while in the public sector, they were only $269.

These per student figures and the extremely high rate of increase in expenditures in Liberal Arts II colleges suggest that private liberal arts colleges are spending a great deal of money to maintain and upgrade facilities in order to attract students. Part of the reason private liberal arts colleges spend so much more in this area than public institutions might be that public institutions may make more efficient use of facilities since more students use the same facilities in public institutions than do in private liberal arts colleges. Again, these expenditures rep-

resent another area in which resources must often be diverted from more "academic" concerns.

d. Libraries

According to table 25, Library expenditures comprised only 4 to 5 percent of total E and G expenditures in all sectors. They were increasing in proportion to total E and G expenditures in the public and private sectors overall, but decreasing in private liberal arts colleges.

On a per student basis, Liberal Arts I colleges ranked highest in expenditures, spending about $173 per student on Libraries in 1973–74. Liberal Arts II colleges ranked near the lowest, spending about only $111 per student. Overall, private institutions spent $143 per student, while public institutions as a whole spend about $100 per student. Only Liberal Arts II colleges did not increase their expenditures for Libraries more than inflation.

While high expenditures per student for Libraries may indicate a desire of an institution to upgrade and maintain the quality of its library facilities and collection, it also reflects the financial difficulties of trying to do so with small enrollments: the fewer the students, the greater the per student costs for maintaining a sophisticated library. And when public institutions, which are generally larger than private liberal arts colleges, spend 4 to 5 percent of their E and G expenditures on Libraries, they are usually spending considerably more money than are private liberal arts institutions.

e. Sponsored Programs Other than Research

As table 25 reveals, Sponsored Programs Other than Research constituted the fifth largest area of expenditures for private liberal arts colleges. These programs include training programs, workshops, work-study programs, and the like. In private liberal arts colleges these expenditures had significantly increased to nearly 3 percent of total E and G expenditures in 1973–74. In the public and private sectors overall, there were also major increases in this area of expenditure. by 1973–74, Sponsored Programs comprised about 6 percent (or double the proportion in private liberal arts colleges) of total E and G expenditures.

On a per student basis, private liberal arts colleges ranked the lowest for expenditures for Sponsored Programs. Liberal Arts I colleges spent only $64 per studnet in this area during 1973–74, while Liberal Arts II colleges spent $81 per student. Private institutions in general spent $204 per student in 1973–74, while public institutions spent $144.

In only Liberal Arts I colleges were increases less than increases in inflation; for them, Sponsored Programs may have been an area for economizing. Liberal Arts II colleges appear to be somewhat more concerned about providing services outside traditional academic ones to the community. These programs also help to attract public attention and hence students and revenue.

f. Sponsored Research and Other Separately Budgeted Research

The sixth largest category of expenditures, table 25 reveals, is Sponsored Research and Other Separately Budgeted Research. Significant decreases in the amounts accounted for by Sponsored Research occurred in most sectors. In private liberal arts colleges, the proportion shrank from 3 percent of E and G expenditures in 1965–66 to only 1 percent in 1973–74. In private institutions in general, it shrank from 31 percent to 12.5 percent, while in the public sector it declined from 20 percent to 10 percent.

In only Liberal Arts II colleges did Sponsored Research expenditures per student increase, but in 1973–74 these institutions still ranked lowest in this area of expenditures, spending only $15 per student. Liberal Arts I institutions spent about $50 per student in 1973–74, while private institutions as a whole spent the most—$422. Public institutions spent $247 per student in 1973–74.

Because of their traditional emphasis on teaching rather than research, as well as their generally lower research capacity, private liberal arts colleges have never allocated much of their budgets to research. The

sizable decrease in the already small allocation represents in part an attempt to economize in a period of financial stringency. This reduction does not appear, in the case of private liberal arts colleges, to reflect a decrease in the proportion of income from Federal sources (much of which is targeted toward research).

However, in the cases of public and private institutions in general, the drastic cutback in expenditures for research does parallel reductions in the proportion of revenues coming from Federal sources. It will be recalled that in the private sector the actual number of dollars from Federal sources declined also. This reduction in the proportional size of the research allocation appears to have enabled public and private institutions in general to devote more of their resources to instruction.

g. Extension and Public Service and Organized Activities Related to Educational Departments

As table 25 indicates, expenditures under Extension and Public Service and Organized Activities Related to Education Departments did not change significantly between 1965–66 and 1973–74, though there may have be slight declines in these areas. Together they accounted for slightly more than 2 percent of E and G expenditures in private liberal arts colleges in 1973–74. In the private sector in general, they accounted for just over 5 percent of E and G expenditures, while in the public sector they comprised 7.5 percent in 1973–74.

Organized Activities Related to Educational Departments, which include expenditures for cultural activities as well as for instructional or laboratory training of students, accounted for less than 1.5 percent of total E and G expenditures in Liberal Arts I colleges, and only 1.7 percent in Liberal Arts II colleges. In the private sector as a whole, they decreased from 5 percent to 4.2 percent of total E and G expenditures by 1973–74, while in the public sector they declined by almost half to only 3.3 percent of E and G expenditures. In all sectors except Liberal Arts II colleges, these expenditures also declined on a per student basis. In most institutions, then, this is an area of economizing.

Extension and Public Service expenditures, which are educational activities designed primarily to serve the general public, constituted a virtually insignificant portion (less than 1 percent) of total E and G expenditures in private liberal arts colleges. In the private sector as a whole, they accounted for only 1 percent of total E and G expenditures. In public institutions, however, they comprised about 4 percent of total E and G expenditures, declining from nearly 7 percent in 1965–66. The larger proportion in the public sector is to be expected, since income from State and local sources plays so important a role in their E and G revenues. Curiously, however, on a per student basis, Extension and Public Service expenditures increased in the private sector in general, as well as in Liberal Arts I and II colleges, but not in the public sector. This phenomenon would seem to suggest that the private sector in general has discovered a new sense of public service during the recent past.

C. Charges to Students

In an attempt to remain competitive with public institutions in attracting students, private liberal arts colleges slightly decreased their dependence upon tuition and fees between 1971–72 and 1973–74, while meeting increasing costs, as was noted above. But tuition and fee charges per student, as well as room and board charges, still increased steadily during that time and continued to do so through 1975–76 (see table 26). Total charges to the student at Liberal Arts I colleges rose from an average of $3,540 in 1972–73 to $4,192 in 1975–76; at Liberal Arts II colleges, they rose from $2,475 to $3,189. These increases were not so high as the increase in inflation: the Consumer Price Index (CPI) rose during this time by 30 percent and the Higher Education Price Index (HEPI) by 24 percent (see appendix table 15).

TABLE 26.—Average Undergraduate Charges for Tuition and Required Fees, Board, and Dormitory Room in Liberal Arts I and II Colleges, by Classification: United States, 1972-73 to 1976-77.

Year and classification	Tuition and required fees	Board	Dormitory rooms
1972-73:			
Liberal arts I.....	$2,384	$628	$528
Liberal arts II....	1,532	541	402
1973-74:			
Liberal arts I.....	2,519	639	542
Liberal arts II....	1,618	561	414
1974-75:			
Liberal arts I.....	2,663	682	579
Liberal arts II....	1,707	600	431
1975-76:			
Liberal arts I.....	2,834	731	627
Liberal arts II....	1,867	654	472
1976-77:			
Liberal arts I.....	3,140	785	667
Liberal arts II....	2,015	677	497

SOURCE. EDSTAT System, HEGIS Tapes, 1973, 1974, 1975, 1976, 1977.

The average charge for tuition and fees alone rose by nearly 20 percent between 1972-73 and 1975-76 at Liberal Arts I colleges and by 22 percent at Liberal Arts II institutions. Both of these increases were less than the rise in the CPI and the HEPI. These charges have increased more rapidly each year, however, and are comparable with the increases in the private sector in general, but they are several times greater than for in-State students in the public sector. Dorfman and Cell report that as many as two-thirds of the public universities did not increase tuition at all during 1975-76.[5] These calculations show yet again both the heavy dependence of private liberal arts colleges on tuition and fees and the difficulties they encounter in remaining competitive with public schools in this respect. In addition, they show that private liberal arts colleges are trying to limit these charges, since they seem to have held them to less than increases in both inflation and in current fund expenditures.

Average room and board charges increased similarly between 1972-73 and 1975-76: for Liberal Arts I colleges, room charges rose by 19 percent to an average of $627, and board charges rose by 16 percent to an average of $731; for Liberal Arts II colleges, room charges rose 17 percent to an average of $472, and board charges rose 21 percent to an average of $654. These increases are again less than the rise in the CPI and the HEPI, as well as the rate of increase of total E and G revenues. They are also competitive with charges in the public and private sectors generally.

If private liberal arts colleges had wished to maintain the proportion of tuition and fee revenues to total E and G revenues at their 1972-73 level, they would have had to raise tuition and fee charges considerably more than they did. Thus, although tuition and fee charges have been increasing recently, they have been accounting for decreasing proportions of total E and G revenues. If endowment income and private gifts and grants, as well as government assistance, had not been so high as they were, Liberal Arts I and II colleges might have had to raise their charges to students even more than they did, thus driving more students into the public sector. (It is interesting to note that even during a period notable for relatively small increases in inflation, 1965-66 through 1968-69, costs to students rose faster than inflation throughout the public and private sectors.)

D. The Student Aid Account

Student aid is a major expenditure incurred by all schools. Current fund data lead to the conclusion that most schools were, to put in bluntly, taking a beating in student aid. According to Jellema, the deficit in student aid often nearly equaled the deficit in current funds at schools running deficits. But, he says, these deficits came about in large part from the typical practice of institutions' arbitrarily assigning an insufficient amount of income to meet student aid expenses. They were thus the result of a "certain amount of accounting artificiality."[6]

State student aid programs, according to Bowen and Minter, embraced in 1975-76

15 to 25 percent of the students in private colleges.[7] Dorfman and Cell claim that in 1975–76, $280 million (or 56 percent of total State student aid appropriations) went to students in private schools.[8] One of the consequences of increased student financial aid is that schools need to raise tuition and fees in order to defray student aid costs, thereby creating a need for financial aid on the part of middle-income students.

In the public sector, student aid revenues were a much smaller portion of revenue than in the private sector, comprising about 2 percent of total current fund revenues between 1965–66 and 1973–74. In the private sector, student aid revenues fluctuated between 3 and 4 percent of total current fund revenues between 1965–66 and 1973–74. In private liberal arts colleges, they were more than twice as large a portion of total current fund revenues as in the public sector: about 5 percent between 1971–72 and 1973–74.

Student aid expenditures were, of course, a much smaller burden in the public sector than in the private, especially in private liberal arts colleges. In the public sector, they comprised between 2 and 4 percent of total current fund expenditures between 1965–66 and 1973–74, while in the private sector, they comprised almost double the burden in public institutions. Per student expenditures for student aid were three times higher in the private sector than in the public. In Liberal Arts I and II colleges, they were still greater, demanding around 10 percent of total current fund expenditures in 1971–72 through 1973–74. This burden is nearly three times that in the public sector. Per student expenditures for student aid at Liberal Arts I colleges were $439 in 1973–74, compared to $110 in the public sector. At Liberal Arts II colleges they were $321. The disadvantage private liberal arts colleges have in their heavy dependence upon tuition and fees is compounded by the need to spend substantial amounts to enable students to pay the tuition and fees in the first place.

By far the largest role in student aid revenue was played by the Federal government (see appendix tables 16 and 17). Federal student aid grants to all institutions increased between 1965–66 and 1973–74 by more than 400 percent in the public sector, and by more than 300 percent in the private. On the other hand, the ratio of student aid revenue increases to enrollment increases was higher in the private sector than in the public. State governments played a larger role in the public sector and have been increasing their role in the private sector. Both sectors also relied heavily upon private gifts and grants for student aid funds. In the private sector, endowment income offically designated for student aid increased dramatically in both dollar amounts and in relation to other sources of income.

The Federal Government played a much larger proportional role in student aid revenues in Liberal Arts II colleges than in Liberal Arts I colleges, which relied upon their endowments for much of their student aid. It should be noted, though, that on a per school basis, Liberal Arts I and II colleges received roughly similar amounts of Federal student aid. Private gifts and grants were also of major importance to both groups of schools, comprising one-quarter of student aid revenues at Liberal Arts I colleges and one-fifth at Liberal Arts II colleges.

E. The Auxiliary Enterprises and Major Service Programs Accounts

Auxiliary Enterprises, comprising such ideally self-supporting concerns as housing and dining facilities, college stores, and intercollegiate athletics, accounted for a significantly smaller proportion of the current fund budget in the public sector than in the private. In both sectors, too, Auxiliary Enterprises revenue exceeded expenditures, suggesting that these institutions are earning surpluses. Thus, the Auxiliary Enterprises account would be a possible source, like endowment, for interfund borrowing in order to help balance budgets.

The margin by which Auxiliary Enterprises revenues exceeded expenditures was smaller in the private sector than in the public, and smaller still in private liberal arts

colleges. In 1973–74, in fact, expenditures exceeded revenues at Liberal Arts I colleges by 1 percent, though at Liberal Arts II colleges, revenues exceeded expenditures by roughly 7 percent.

Auxiliary Enterprises revenues per student in private liberal arts colleges were two to three times greater than in the public sector, but increases in these revenues were less than increases in inflation, thus showing the pressure these schools have felt to attract students. Increases in Auxiliary Enterprises expenditures per student were also less than inflation, but they were much larger than increases in per student Auxiliary Enterprises revenues.

Major Service Programs, such as hospitals and other predominantly community-oriented activities, comprised less than 1 percent of revenues and expenditures at private liberal arts colleges between 1971–72 and 1973–74. Such comparatively insignificant proportions of current funds do not merit lengthy analysis here.

F. Recapitulation

Since judgments of financial health are often equated with judgments of institutional health in general, they thereby divert attention from other important, albeit intangible, aspects of the condition of colleges, such as intellectual vitality and quality, among other things. Conclusions, then, must be tentative and restricted to essentially empirical observations.

It may be concluded that Liberal Arts I colleges were able or willing between 1971–72 and 1973–74 to increase their per student expenditures in only two of the major expenditure areas—Libraries and Other E and G; in the remaining areas they held expenditures to below the increase in both the CPI and the HEPI. Liberal Arts II colleges, on the other hand, increased their per student expenditures more than inflation in most of those areas in which Liberal Arts I economized: Instruction and Departmental Research, Other E and G, Plant Operations and Maintenance, Research, Sponsored Programs other than Research, and Organized Activities Related to Educational Departments. These patterns may reflect what institutions consider to be important or they may indicate an inability to control expenditures.

In more general terms, between 1971–72 and 1973–74 E and G revenues exceeded expenditures by increasing amounts in Liberal Arts I colleges but by decreasing amounts in Liberal Arts II. The margin between E and G revenues and expenditures in Liberal Arts II colleges was slightly lower than in the public sector and near that in the private sector overall. Liberal Arts I had the highest margin of all groups. Student aid costs consistently ran much higher than income restricted to student aid in all sectors and constituted a much larger proportion of total expenditures at private liberal arts colleges than elsewhere. These high costs reflect the high charges to students in private liberal arts colleges and the consequent lengths to which these colleges went to attract students. Moreover, had the student aid burden not been so high, private liberal arts colleges could have, if they wished, competed more effectively with other sectors by maintaining or improving quality. Auxiliary Enterprises also comprised a larger portion of current fund budgets at private liberal arts colleges than elsewhere. The trend in Liberal Arts I colleges was for Auxiliary Enterprises expenditures to increase until they surpassed revenues in 1973–74; in Liberal Arts II colleges, on the other hand, Auxiliary Enterprises revenues were consistently 7 percent higher than expenditures.

In spite of the fluctuations in the balance between revenues and expenditures in a number of these accounts, the current fund accounts suggest more short term stability for private liberal arts colleges in general than for much of the rest of the private sector. Current fund revenues exceeded expenditures at both Liberal Arts I and II colleges; in the private sector generally, though, there were current funds deficits in both 1965–66 and 1970–71. The gap between current fund revenues and expendi-

tures increased at Liberal Arts I colleges, but it decreased at Liberal Arts II.

Financial data also reveal the importance to private liberal arts colleges of fluctuations in enrollment: since so much of their revenue is derived from tuition and fees, declines in their enrollments affect their financial condition much more drastically than declines in enrollment affect the financial condition of public schools, where revenues derive mainly from State aid. In addition, endowment funds are much more important to private liberal arts colleges, especially to Liberal Arts I colleges, than to public institutions, while to Liberal Arts II colleges, private contributions are more important than endowment. Tax laws governing charitable contributions obviously have much impact upon these aspects of income. It is usually taken for granted that since private schools depend so heavily upon tuition and fees, endowments, and private donations, they are intrinsically in a more precarious financial situation than public schools. But the precariousness of public schools' financial situation must not be underestimated, for they are also subject to the forces of the economy, as well as to the whims of legislatures, not to mention public opinion.

The data also reveal a large and growing tuition gap between the private and public sectors, especially in the case of Liberal Arts II colleges. The numerous arguments for public assistance to private higher education that propose to reduce this gap are predicated upon the assumption that the tuition gap is responsible for the imbalance in enrollment patterns between the two sectors. In a detailed survey of price effects on enrollments, Michael McPherson concludes that the "growth in the tuition gap which occurred during the 1960's accounted for something less than half of the shift in enrollment from private to public institutions. . . . The rest presumably resulted from . . . non-price factors." [9] (This shift occurred mainly among students from families with incomes of from $15,000 to $25,000; Liberal Arts II colleges were the most severely affected by the gap.)

The nonprice factors McPherson refers to include the quality of the education offered and the quality of student life, as well as the accessibility of public institutions. (Liberal Arts II colleges are located predominantly in rural areas and are not so easily accessible as public schools to the majority of students, who live in urban areas.) Other data already considered have shown that a number of fundamental changes in the nature of many private liberal arts colleges—such as becoming coeducational and secular—occurred during periods not noted for inflationary pressure or enrollment decline and hence can be attributed more to changes in educational philosophy, goals, and values, or to response to student advocacy.

The rise in charges to students, though from some viewpoints spectacular, and certainly higher in the private sector than in the public, did not, at least between 1971–72 and 1973–74, increase so much as inflation, nor were these increases so high as increases in average personal income. Bowen and Minter, in their 1977 report on financial and educational trends in private education, state that between 1965–66 and 1975–76 "the dollar difference between public and private student charges, relative to the incomes from which these charges must be paid, did not change." [10]

Finally, one of the most common generalities concerning the financial status of colleges is that the smallest schools are the least economically secure because they have higher per student expenditures. (The data show that the number of very small schools is decreasing.) But Jellema's studies do not support that economic adage, in spite of the fact that some expenses, per student costs of administration, for example, are higher at smaller institutions. On the other hand, he discovered that while smallness does not preclude economic security, smallness and economic insecurity do preclude wide course and program offerings.[11] Astin has demonstrated a significant correlation between attrition rates and size of institution in those schools with fewer than 500 students.

In short, then, there is much dispute in education circles about the significance of most of the financial data that are available. Perhaps we can be content with the generality that, on the basis of aggregate data, private liberal arts colleges could be in a far more perilous situation than they appear to be. On the other hand, the most recent comparable data are 3 years old, and inflation, while abating somewhat, still constitutes a major financial problem. The 1977 Bowen-Minter study, however, suggests that private liberal arts colleges are generally holding their own.[12] All the same, some private liberal arts colleges have closed. What the impact upon the public weal is of the demise of some institutions and the financial deterioration of others is difficult to assess. At some point, if these trends continue unabated, the national interest will be adversely affected.[13]

CHAPTER V.—NOTES

1. Caution must be used in interpreting aggregate data. Obviously, the data may contain clerical errors. In addition, terms on HEGIS forms may be interpreted by different institutions in different ways, so responses may differ significantly from institution to institution. Also, the situation at individual schools may differ considerably from that revealed by aggregate data. And aggregate data give no indication of the range of responses to various questions.

2. Bowen and Minter (1976), p. 58.

3. William W. Jellema. *From Red to Black? The Financial Status of Private Colleges and Universities*. San Francisco. Jossey-Bass, 1973, p. 29.

4. Bowen and Minter (1976), pp. 95–96.

5. Dorfman and Cell, p. 11.

6. Jellema, p. 65.

7. Bowen and Minter (1976), pp. 80–81.

8. Dorfman and Cell, p. 10.

9. Michael S. McPherson, "The Demand for Private Higher Education," Chapter 3 of *Public Policy and Private Higher Education*, ed. David G. Breneman and Chester E. Finn. Washington. Brookings Institution, forthcoming, p. 56 of ms.

10. Howard R. Bowen and W. John Minter. *Private Higher Education. Third Annual Report on Financial and Educational Trends in the Private Sector of American Higher Education*. Washington. Association of American Colleges, 1977, p. 64.

11. Jellema, pp. 106, 112.

12. Bowen and Minter (1977), p. 2.

13. Some preliminary data from NCES show that for the 1975–76 academic year, the growth rate of both current fund revenues and expenditures declined in all institutions. As might be expected, the dependence of institutions on revenues from tuition and fees increased, but more rapidly in the public sector than in the private. At the same time, expenditures for student aid rose—more in the private sector than in the public. See Jack Magarrell, "Three Economic Indicators for U.S. Higher Education," *Chronicle of Higher Education*, May 2, 1977.

CHAPTER VI

Conclusion

As of 1974–75 the average private liberal arts institution was a religiously affiliated (usually Protestant), coeducational, relatively less selective college with an enrollment of about 1,000. Its 1975 freshman class was still mostly white, though it had more minority students than in years past. Most of its freshmen were 18 years old, though there were more than before who were older. Most students claimed a Protestant affiliation, had an average grade in high school of B, ranked in the top 40 percent of their high school classes, and had a combined SAT score of 1,030. Most planned to take bachelors' degrees, and a third planned to go on for masters' degrees. They continued to flee the humanities and liberal arts, majoring instead, in order of preference, in business, education, biological sciences, preprofessional studies, and preparation for the non-M.D. health professions as well as certain more "unconventional" careers. Other important aims for them were to be authorities in their own fields, to help others, to develop philosophies of life, and to raise families.

The faculty at private liberal arts colleges seemed to be more student-centered than average. More also had the doctorate, but fewer at Liberal Arts II colleges were research and publication oriented. Their teaching load was among the highest and their student-faculty ratios, though lower than average, were increasing at a faster than average rate. Compensation had increased less than that of the average worker and inflation; it had also fallen behind that of faculty in other sectors of higher education, as well as behind that of administration and staff. In consequence, collective bargaining had begun to spread into even religiously affiliated schools.

The average school offered around 230 courses, led by courses in music, and followed by courses in engineering, education business and accounting, English, art, history, and mathematics. It had increased its course offerings by anywhere from 11 to 60 percent within the last half-dozen years. It had also expanded its programs, student services, and individually designed curriculums.

On average, schools charged students between $3,189 and $4,592 for total costs. Tuition and fees comprised roughly one-third of total current fund revenues at the average school in 1974–75, thereby making the school especially vulnerable to declines in enrollment.

On an aggregate basis, it appears that, at least during the early 1970's, private liberal arts colleges as a whole, especially Liberal Arts I colleges, were operating in the black, but were in a vulnerable position. In 1974–75, Liberal Arts II colleges appear to have gone in the red.

It does not follow that private liberal arts education was or is healthy, for health surely also depends on numerous other considerations which resist empirical analysis. An evaluation of the health of private liberal arts colleges must recognize that the traditional liberal arts degree is under serious challenge, that many schools have adopted various alternatives to it, and that some have relaxed standards in both grading and admissions policies. In addition, the increase in the student-faculty ratio and the failure of faculty compensation to keep pace with the cost of living doubtless have some impact upon morale and the quality of education. The reduction of research allocations, while redirecting a school's attention to instruction, may also have a demoralizing effect, especially when this rededication to students is undermined by increases in the student-faculty ratio.

The most ominous trend confronting private higher education, especially private liberal arts colleges, and even more especially Liberal Arts II colleges, is the recent trend toward leveling enrollments, a trend which seems likely to evolve into declining enrollments in all sectors as the pool of traditional college-age people shrinks. A number of the trends that have been identified in this study are at least simultaneous and probably correlated with trends in enrollments. For example, the available data show that enrollment has leveled as the economic returns of a college education have declined. At the same time, students have become more pragmatic and less idealistic, and they have begun abandoning the disciplines in which liberal arts colleges have traditionally specialized. The end of the Vietnam war may be another reason that private college enrollments have been leveling, but the slowing of growth has not yet occurred in the public sector, indeed, enrollment has grown rapidly there. Enrollment in private liberal arts colleges has slowed also as the rate of unemployment has risen. The conclusion thus seems inevitable that many students are becoming less interested in what private liberal arts colleges have to offer.

These colleges seem to have responded in a variety of ways to declines in enrollment growth. For example, course offerings have increased, numerous requirements have been relaxed or abolished, and open admissions policies have been inaugurated. At least in part as a consequence of relaxed admissions standards, it would seem, students' SAT scores have declined as have their high school class standings. Grade inflation is probably due at least in part to the decline in enrollment growth as well as to some instructors' desires to enable their students to avoid the draft and others' opposition to grades in principle. Private liberal arts colleges have held the increase in their charges to students to considerably less than the increase in inflation and, in order to mitigate these losses, have cut expenditures for research and for increases in faculty salaries, among other things. Liberal arts colleges generally, but Liberal Arts II colleges in particular, have greatly increased their student aid expenditures in order to attract students. (As was observed above, there seems to be little correlation between enrollment growth declines, and hence possible financial distress, and decreases in the number of religiously affiliated and single-sex schools. That is, the trends toward coeducational student bodies and independence from ecclesiastical control appear to be based in nonfinancial considerations, though financial constraints are not precluded.)

The new freedom and authority given to students in matters of curriculum and governance, as well as the need that many, if not most, institutions feel not to alienate their clientele, have mixed effects on the morale and performance of different segments of the college community as well as upon ideals such as academic freedom and intellectual integrity. The treatment of schools as businesses, by both external and internal policymakers, has the effect of perhaps increasing some measures of efficiency but reducing sympathy with pure research and objective inquiry. And the attention given to the economic returns from a college education tends to turn that education into a consumer product which is designed primarily to produce only specific and concrete results, to the neglect of habits of thinking and feeling.

As Alan Pifer has forcefully pointed out, although a college degree now appears to accrue relatively lower economic returns than it once did, it is dangerous to leap to the conclusion that a degree is worth less to the national interest or that it is a bad investment. Indeed, a college education provides essential services to the individual and society. Pifer reminds us that colleges foster a "breadth, flexibility and autonomy of mind, and a questioning . . . spirit." They preserve "our immensely rich and varied cultural heritage." They permit access to a "wide variety of professions and

higher level jobs." And they are essential to the "discovery of new knowledge." [1] Private liberal arts colleges are a vital segment of the higher education community and contribute substantially to the realization of these ideals.

CHAPTER VI.—NOTES

1. Alan Pifer, "The Report of the President," *Annual Report, Carnegie Corporation of New York, 1975*, pp. 6-8.

SELECTED BIBLIOGRAPHY

Andrew, Loyd D. and Burton D. Friedman. *A Study of the Causes for the Demise of Certain Small, Private, Liberal Arts Colleges in the United States.* (USOE Contract No. 300-75-0376) College of Education, Virginia Polytechnic Institute and State University, 1976.

Astin, Alexander W. *Preventing Students from Dropping Out.* San Francisco: Jossey-Bass, 1975.

———. *The American Freshman. National Norms for Fall 1966, 1970, 1975, 1976.* Washington and Los Angeles: American Council on Education and UCLA.

Bayer, Alan E. *Teaching Faculty in Academe. 1972-73.* Washington. American Council on Education, 1973.

Bowen, Howard R. and W. John Minter. *Private Higher Education. First Annual Report on Financial and Educational Trends in the Private Sector of American Higher Education.* Washington. Association of American Colleges, 1975.

———. *Private Higher Education. Second Annual Report on Financial and Educational Trends in the Private Sector of American Higher Education.* Washington: Association of American Colleges, 1976.

———. *Private Higher Education. Third Annual Report on Financial and Educational Trends in the Private Sector of American Higher Education.* Washington: Association of American Colleges, 1977.

Brown, Ralph S., Jr. "Financial Exigency," *AAUP Bulletin*, 62, no. 1 (Spring 1976), pp. 5-19.

Cartter, Allan M. and Lewis G. Solmon. "Implications for Faculty," in "The Financial State of Higher Education," *Change*, 8, no. 8 (September 1976), pp. 37-38.

A Classification of Institutions of Higher Education. Berkeley. The Carnegie Commission on Higher Education, 1973.

Coughlin, Ellen K. "Three Economic Indicators for U.S. Higher Education," *Chronicle of Higher Education*, May 2, 1977, p. 5.

Digest of Education Statistics 1969-1976. Washington: DHEW/NCES.

Dorfman, Robert. "Two Steps Backward. Report on the Economic Status of the Profession, 1974-75," *AAUP Bulletin*, 61, no. 2 (Summer 1975), pp. 118-199.

——— and Donald C. Cell, "Nearly Keeping Up. Report on the Economic Status of the Profession, 1975-76," *AAUP Bulletin*, 62, no. 2 (Summer 1976), pp. 195-284.

Dressel, Paul L. and Frances H. DeLisle. *Undergraduate Curriculum Trends.* Washington. American Council on Education, 1969.

Earned Degrees Conferred 1973-74. Washington: DHEW/NCES, 1976.

EDSTAT System. *HEGIS Data Tapes*, FY 1970-FY 1975.

Education Commission of the States. *Collective Bargaining in Postsecondary Educational Institutions.* Report No. 45 (Denver, March 1974).

Education Directory. Higher Education, Colleges and Universities 1954/55-1976/77. Washington: DHEW/NCES.

El-Khawas, Elaine H. *Public and Private Higher Education. Differences in Role, Character, and Clientele.* (USOE Contract No. 300-75-0375) Washington, 1976.

———. *Report on a Study of the Private Sector of Higher Education to the United States Office of Education.* (USOE Contract No. 300-75-0375) Washington, 1976.

Faculty and Other Professional Staff in Institutions of Higher Education, First Term 1959-60. Washington: DHEW/NCES, 1963.

Financial Statistics of Institutions of Higher Education. Current Funds Revenues and Expenditures 1965-66, 1970-71. 1972-73, 1973-74. Washington: DHEW/NCES, 1969, 1974, 1976.

Freeman, Richard B. *The Overeducated American.* New York: Academic Press, 1976.

——— and J. Herbert Holloman. "The Declining Value of College Going," *Change*, 7, no. 8 (September 1975), pp. 24-31, 62.

Froomkin, Joseph and Clinton McCully. *A Review of Financial Developments in Higher Education, 1970-71—1974-75, and a Prognosis for 1980-1985.* (USOE Contract No. 300-76-0026) Washington. EPRC for Higher Education, 1977.

Halstead, D. Kent. *Higher Education Prices and Price Indexes.* Washington. U.S. Office of Education, 1975, and *1975 and 1976 Supplements.*

Higher Education and National Affairs, March 18, 1977, p. 6.

"Irvine's Alumni Survey Finds Jobless Rate Low Despite Tight Market," *Chronicle of Higher Education*, Feb. 2, 1977.

Jellema, William W. *From Red to Black? The Financial Status of Private Colleges and Universities.* San Francisco: Jossey-Bass, 1973.

Ladd, Everett Carll, Jr., and Seymour Martin Lipset. "The Aging Professoriate," *Chronicle of Higher Education*, May 24, 1976, p. 16.

———. "Sex Differences in Academe," *Chronicle of Higher Education*, May 10, 1976, p. 18.

Lupton, Andrew H., John Augenblick, and Joseph Heyison. "The Financial State of Higher Education," *Change*, 8, no. 8 (September 1976), pp. 20-38.

Magarrell, Jack. "Three Economic Indicators For U.S. Higher Education," *Chronicle of Higher Education*, May 2, 1977

McPherson, Michael S. "The Demand for Private Higher Education," chapter 3 of *Public Policy and Private High Education*, ed. David G. Breneman and Chester E. Finn. Washington. Brookings Institution, forthcoming.

Metzger, Walter P. "The American Academic Profession in 'Hard Times,'" *Daedalus*, 1975, pp. 25–44.

Numbers of Employees in Institutions of Higher Education. Fall 1972. Washington. DHEW/NCES, 1976.

Projections of Education Statistics to 1985–86. Washington: DHEW/NCES, 1977.

Riesman, David and Verne A. Stadtman. *Academic Transformation. Seventeen Institutions Under Pressure.* New York. McGraw-Hill, 1973.

Salaries, Tenure, and Fringe Benefits of Full Time Instructional Faculty in Institutions of Higher Education, 1975–76. Washington: DHEW/NCES, 1977.

Scully, Malcolm G. "Many Colleges Re Appraising Their Undergraduate Curricula," *Chronicle of Higher Education*, Feb. 7, 1977, pp. 1, 10.

Selected Statistics on Salaries and Tenure of Full Time Instructional Faculty. DHEW/NCES, April 19, 1977.

Shark, Alan R., Kathleen Brouder, and Associates. *Students and Collective Bargaining.* Washington. National Student Educational Fund, 1976.

Smith, Ron. "The Composition Requirement Today. A Report on a Nationwide Survey of Four-Year Colleges and Universities," *College Composition and Communication*, 25 (May 1974), pp. 138–48.

Steiner, Peter O., Maryse Eymonerie, and William B. Woolf. "At the Brink. Report on the Economic Status of the Profession, 1970–71," *AAUP Bulletin*, 57, no. 2 (Summer 1971), pp. 223–285.

Trow, Martin. *Aspects of American Higher Education 1969–1975.* Berkeley. The Carnegie Council on Policy Studies in Higher Education, 1977.

APPENDIX TABLES

APPENDIX TABLE 1.—Private Liberal Arts I Colleges, by Size of Enrollment. United States and Outlying Areas, Fall 1955 to Fall 1976

Enrollment size	1955		1960		1965		1970		1971		1972		1973		1974		1975		1976	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Pe ce
Under 200	11	8.1	4	2.9	3	2.1	0	...	1	0.7	0	...	0	...	0	...	1	0.7	1	0
200-499	37	27.2	23	16.8	12	8.5	8	5.6	5	3.5	7	5.0	8	5.7	8	5.7	8	5.8	8	5
500-749	34	25.0	28	20.4	28	19.9	26	18.1	22	15.6	18	12.9	21	15.0	19	13.6	15	10.9	14	10
750-999	19	14.0	34	24.8	26	18.4	24	16.8	26	18.4	24	17.1	18	12.9	21	15.0	24	17.4	24	17
1,000-1,499	28	20.6	35	25.5	47	33.3	39	27.3	39	27.7	43	30.7	42	30.0	39	27.9	37	26.8	37	26
1,500-1,999	5	3.7	8	5.8	20	14.1	32	22.4	32	22.7	30	21.4	29	20.7	31	22.1	28	20.3	30	21
2,000+	2	1.5	5	3.6	5	3.5	14	9.8	16	11.3	18	12.9	22	15.7	22	15.7	25	18.1	24	17
Total institutions	136	100.0	137	100.0	141	100.0	143	100.0	141	100.0	140	100.0	140	100.0	140	100.0	138	100.0	138	100

NOTE: Due to rounding, percentages may not add to 100.0%. The practice of The *Education Directory* is to categorize institutions on the basis of their previous year's enrollment. Thus, for example, there were in 1955 11 institutions with 1954 enrollments of less than 200.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, *Higher Education. Education Directory, 1955–56—1975–76.*

APPENDIX TABLE 2.—Private Liberal Arts II Colleges, by Size of Enrollment. United States and Outlying Areas, Fall 1955 to Fall 1976

Enrollment size	1955		1960		1965		1970		1971		1972		1973		1974		1975		1976	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Pe cer
Under 200	62	15.9	41	9.4	34	7.1	39	7.2	38	7.1	34	6.4	26	5.1	26	5.2	27	5.5	25	5.
200-499	198	51.0	175	40.3	110	22.9	92	16.9	86	16.1	85	16.1	93	18.2	89	17.7	77	15.6	71	14.
500-749	75	19.3	114	26.3	136	28.3	134	24.6	121	22.7	115	21.7	120	23.4	115	22.9	111	22.7	105	21.
750-999	35	9.0	59	13.6	103	21.5	122	22.4	120	22.5	118	22.3	103	20.1	99	19.7	93	18.8	102	20.
1,000-1,499	11	2.8	34	7.8	70	14.5	113	20.7	119	22.3	121	22.9	110	21.5	117	23.3	119	24.0	106	21.
1,500-1,999	5	1.3	10	2.3	18	3.8	30	5.5	32	6.0	34	6.4	41	8.0	34	6.8	43	8.7	55	11.
2,000+	2	0.5	1	0.2	9	1.9	15	2.8	18	3.4	22	4.2	19	3.7	22	4.4	23	4.7	27	5.
Total institutions	388	100.0	434	100.0	480	100.0	545	100.0	534	100.0	529	100.0	512	100.0	502	100.0	493	100.0	491	100.0

NOTE: Due to rounding, percentages may not add to 100.0%. The practice of The *Education Directory* is to categorize institutions on the basis of their previous year's enrollment. Thus, for example, there were in 1955 62 institutions with 1954 enrollments of less than 200.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, *Higher Education. Education Directory, 1955–56—1976–77.*

APPENDIX TABLE 3.—Number of Private Institutions of Higher Education, by Institutional Affiliation:[1] United States and Outlying Areas, 1954–55 to 1976–77

	Total institutions		Independent		Religiously affiliated				
					All denominations				
	Number	Percent	Number	Percent	Number	Percent	Catholic	Protestant	Other
1954–55	1,204	100.0	483	40.1	721	59.9	247	469	5
1955–56	1,203	100.0	480	39.9	723	60.1	248	470	5
1956–57	1,225	100.0	481	39.3	744	60.7	265	474	5
1957–58	1,268	100.0	505	39.8	763	60.2	277	481	5
1958–59	1,280	100.0	509	39.8	771	60.2	280	486	5
1959–60	1,313	100.0	520	39.6	793	60.4	294	494	5
1960–61	1,325	100.0	520	39.2	805	60.8	303	496	6
1961–62	1,319	100.0	512	38.8	807	61.2	308	475	24
1962–63	1,357	100.0	515	38.0	842	62.0	335	482	25
1963–64	1,377	100.0	507	36.8	870	63.2	361	483	26
1964–65	1,384	100.0	507	36.6	877	63.4	366	484	27
1965–66	1,417	100.0	524	37.0	893	63.0	381	484	28
1966–67	1,446	100.0	536	37.1	910	62.9	391	489	30
1967–68	1,489	100.0	576	38.7	913	61.3	391	486	36
1968–69[2]									
1969–70	1,472	100.0	637	43.3	835	56.7	318	486	31
1970–71	1,472	100.0	655	44.5	817	55.5	300	485	32
1971–72	1,474	100.0	671	45.5	803	54.5	280	489	34
1972–73	1,493	100.0	696	46.6	797	53.4	269	494	34
1973–74	1,528	100.0	746	48.8	782	51.2	253	494	35
1974–75	1,585	100.0	[3]795	50.2	790	49.8	253	501	36
1975–76	1,601	100.0	[3]815	50.9	786	49.1	247	501	38
1976–77	1,608	100.0	[3]823	51.2	785	48.8	242	504	39

[1] Institutional affiliation as listed in the *Education Directory* is reported by the institution. Occasionally an institution will vary in listing itself as Religiously Affiliated or Other.

[2] Data not tabulated.

[3] Includes profitmaking institutions from 1974–75 on.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, *Higher Education Education Directory, 1954–55—1976–77.*

APPENDIX TABLE 4.—Private Liberal Arts I Colleges, by Institutional Affiliation.[1] United States and Outlying Areas, 1955-56 to 1976-77

Academic year	Total institutions	Independent		Religiously affiliated				
				All denominations				
		Number	Percent	Number	Percent	Catholic	Protestant	Other
1955-56	136	69	50.7	67	49.3	26	41	0
1960-61	137	75	54.7	62	45.3	25	37	0
1965-66	141	75	53.2	66	46.8	29	37	0
1970-71	143	90	62.9	53	37.1	19	34	0
1971-72	141	89	63.1	52	36.9	17	35	0
1972-73	140	91	65.0	49	35.0	16	33	0
1973-74	140	91	65.0	49	35.0	16	33	0
1974-75	140	92	65.7	48	34.3	16	32	0
1975-76	138	92	66.7	46	33.3	15	31	0
1976-77	138	91	65.9	47	34.1	15	32	0

[1] Institutional affiliation as listed in the *Education Directory* is reported by the institution.

NOTE. Percentages in all cases are percentages of total. Due to rounding, percentages may not add to 100.0%.

SOURCE. U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, *Higher Education. Education Directory, 1955-56—1976-77.*

APPENDIX TABLE 5.—Private Liberal Arts II Colleges, by Institutional Affiliation.[1] United States and Outlying Areas, 1955-56 to 1976-77

Academic year	Total institutions	Independent		Religiously affiliated				
				All denominations				
		Number	Percent	Number	Percent	Catholic	Protestant	Other
1955-56	388	69	17.8	319	82.2	103	214	2
1960-61	434	77	17.7	357	82.3	128	226	3
1965-66	480	83	17.3	397	82.7	155	235	7
1970-71	545	153	28.1	392	71.9	150	237	5
1971-72	534	153	28.7	381	71.3	138	239	4
1972-73	529	154	29.1	375	70.9	133	238	4
1973-74	512	153	29.9	359	70.1	121	234	4
1974-75	502	148	29.5	354	70.5	119	232	3
1975-76	493	145	29.4	348	70.6	118	228	2
1976-77	491	144	29.3	347	70.7	115	228	4

[1] Institutional affiliation as listed in the *Education Directory* is reported by the institution.

NOTE. Percentages in all cases are percentages of total. Due to rounding, percentages may not add to 100.0%.

SOURCE. U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, *Higher Education. Education Directory, 1955-56—1976-77.*

APPENDIX TABLE 6.—Degree-Credit Enrollment for Private Liberal Arts I Colleges, by Institutional Affiliation, United States and Outlying Areas, Fall 195 to Fall 1975

Affiliation of institution	1954		1959		1964		1969		1970	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	100,446	100.0	124,302	100.0	149,519	100.0	175,320	100.0	180,743	100.
Independent	54,339	54.1	68,020	54.7	79,455	53.1	110,022	62.8	113,754	62.
All religious affiliations	46,107	45.9	56,282	45.3	70,064	46.9	65,298	37.3	66,989	37.
Roman Catholic	15,175	15.1	20,305	16.3	26,823	17.9	18,160	10.4	18,187	10.
Protestant	30,932	30.8	35,977	28.9	43,241	28.9	47,138	26.9	48,802	27.
Other	0	0	0	0	0	0	0	0	0	0

	1971		1972		1973		1974		1975	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	182,455	100.0	187,251	100.0	188,231	100.0	191,319	100.0	194,532	100.
Independent	119,320	65.4	123,731	66.1	127,052	67.5	130,757	68.3	130,496	67.
All religious affiliations	63,135	34.6	63,520	33.9	61,179	32.5	60,562	31.7	64,036	32.
Roman Catholic	18,456	10.1	17,200	9.2	17,491	9.3	18,335	9.6	19,215	9.
Protestant	44,679	24.5	46,320	24.7	43,688	23.2	42,227	22.1	44,821	23.
Other	0	0	0	0	0	0	0	0	0	

[1] Institutional affiliation as listed in the *Education Directory* is reported by the institution.

NOTE: Percentages in all cases are percentages of the total. Due to rounding, percentages may not add to 100.0%.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, *Higher Education. Education Directory, 1955–56—1975–76*

APPENDIX TABLE 7.—Degree-Credit Enrollment for Private Liberal Arts II Colleges, by Institutional Affiliation:[1] United States and Outlying Areas, Fall 195 to Fall 1975

Affiliation of institution	1954		1959		1964		1969		1970	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	172,765	100.0	249,079	100.0	355,262	100.0	457,215	100.0	461,814	100.
Independent	30,842	17.9	40,773	16.4	58,692	16.5	135,295	29.6	142,057	30.
All religious affiliations	141,923	82.1	208,306	83.6	296,570	83.5	321,920	70.4	319,757	69.
Roman Catholic	43,574	25.2	70,798	28.4	104,980	29.5	111,045	24.3	104,229	22.
Protestant	97,662	56.5	136,094	54.6	188,165	53.0	207,344	45.3	212,502	46.
Other	687	0.4	1,414	0.6	3,425	1.0	3,531	0.8	3,026	0.

	1971		1972		1973		1974		1975	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	468,918	100.0	457,468	100.0	454,002	100.0	461,475	100.0	482,557	100.
Independent	147,400	31.4	149,846	32.8	155,433	34.2	157,951	34.2	171,493	35.
All religious affiliations	321,518	68.6	307,622	67.3	298,569	65.8	303,524	65.8	311,064	64.
Roman Catholic	103,639	22.1	98,600	21.6	96,596	21.3	99,506	21.6	111,409	23.
Protestant	214,843	45.8	206,319	45.1	200,299	44.1	203,640	44.1	195,870	40.
Other	3,036	0.7	2,703	0.6	1,674	0.4	378	0.1	3,785	0.

[1] Institutional affiliation as listed in the *Education Directory* is reported by the institution.

NOTE: Percentages in all cases are percentages of the total. Due to rounding, percentages may not add to 100.0%.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, *Higher Education: Education Directory, 1955–56—1975–76.*

APPENDIX TABLE 8.—Private Liberal Arts I Colleges, by Sex of Student Enrollment: United States and Outlying Areas, 1955–56 to 1976–77

Academic year	Total liberal arts I institutions	Coed		Male		Female		Coordinate [1]	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent
1955–56	136	59	43.3	22	16.2	51	37.5	4	2.9
1960–61	137	63	46.0	21	15.3	50	36.5	3	2.2
1965–66	141	63	44.7	22	15.6	53	37.6	3	2.1
1970–71	143	81	56.6	13	9.1	44	30.8	5	3.5
1971–72	141	87	61.7	12	8.5	36	25.5	6	4.3
1972–73	140	89	63.6	10	7.1	36	25.7	5	3.6
1973–74	140	91	65.0	10	7.1	36	25.7	3	2.1
1974–75	140	92	65.7	10	7.1	36	25.7	2	1.4
1975–76	138	96	69.6	8	5.8	32	23.2	2	1.4
1976–77	138	96	69.6	6	4.3	32	23.2	4	2.9

[1] Institutions maintaining separate colleges for men and women.

NOTE: Due to rounding, percentages may not add to 100.0%.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, *Higher Education. Education Directory, 1955–56—1976–77.*

APPENDIX TABLE 9.—Private Liberal Arts II Colleges, by Sex of Student Enrollment, United States and Outlying Areas, 1955–56 to 1976–77

Academic year	Total liberal arts II institutions	Coed		Male		Female		Coordinate [1]	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent
1955–56	388	247	63.7	34	8.8	105	27.1	2	0.5
1960–61	434	275	63.4	41	9.4	116	26.7	2	0.5
1965–66	480	307	64.0	48	10.0	120	25.0	5	1.0
1970–71	543	414	76.0	38	7.0	86	15.8	7	1.3
1971–72	534	425	79.6	31	5.8	73	13.7	5	0.9
1972–73	529	429	81.1	27	5.1	67	12.7	6	1.1
1973–74	512	427	83.4	21	4.1	59	11.5	5	1.0
1974–75	502	422	84.1	21	4.2	53	10.6	6	1.2
1975–76	493	419	85.0	24	4.9	44	8.9	6	1.2
1976–77	491	419	85.3	20	4.1	47	9.6	5	1.0

[1] Institutions maintaining separate colleges for men and women.

NOTE: Due to rounding, percentages may not add to 100.0%.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, *Higher Education. Education Directory, 1955–56—1976–77.*

APPENDIX TABLE 10.—Objectives Considered To Be Essential or Very Important: Weighted National Norms in Percentages for All First-Time, Full-Time Freshmen at Institutions of Higher Education, by Control and Affiliation, Fall 1966, Fall 1970, and Fall 1976

Objectives considered to be essential or very important	All institutions			4-year colleges					
				All			Public		
	1966	1970	1976	1966	1970	1976	1966	1970	1976
Be active in a performing art	10.8	12.8	11.6	11.6	13.5	13.3	10.2	12.6	12.
Be an authority in my field	66.0	66.8	70.1	66.8	66.9	70.6	65.6	66.0	70.
Obtain recognition from colleagues	42.6	39.9	45.9	43.5	39.4	46.1	44.8	38.5	46.
Influence political structure	(1)	18.3	15.2	(1)	19.1	16.6	(1)	17.0	15.
Influence social values	(1)	34.9	29.7	(1)	35.6	32.6	(1)	33.7	30.
Raise a family	(1)	67.5	57.2	(1)	68.0	58.3	(1)	68.2	56.
Have administrative responsibility	28.6	21.7	31.9	27.7	20.4	30.5	27.7	19.8	31.
Be an expert in finance	13.5	15.8	(1)	12.5	14.7	(1)	13.7	15.3	(1)
Be very well off financially	43.8	39.1	53.1	40.7	36.2	49.2	43.7	38.6	52.
Perform or compose music	7.8	(1)	(1)	8.3	(1)	(1)	7.2	(1)	(1)
Help others in difficulty	68.5	64.9	63.1	71.9	67.6	67.2	70.3	66.4	65.
Have active social life	(1)	56.5	(1)	(1)	56.4	(1)	(1)	58.2	(1)
Have friends different from me	(1)	61.6	(1)	(1)	63.2	(1)	(1)	62.5	(1)
Participate in Peace Corps/VISTA	21.0	19.6	(1)	23.8	21.2	(1)	20.0	19.9	(1)
Contribute to scientific theory	13.3	10.2	14.0	12.8	10.0	13.7	10.5	8.7	13.
Become a community leader	26.1	15.2	(1)	28.3	16.1	(1)	27.5	14.1	(1)
Participate in community action	(1)	29.4	28.8	(1)	31.3	32.0	(1)	29.7	30.
Write original works	14.2	14.0	12.6	15.2	14.8	14.3	12.2	13.7	14.
Creating artistic works	15.1	16.2	14.3	14.9	16.3	14.5	13.4	15.7	14.
Be successful in my own business	53.0	43.9	45.0	50.3	40.8	42.0	53.9	41.5	42.
Not be obligated to people	28.3	22.7	(1)	27.4	21.9	(1)	29.2	22.6	(1)
Be involved in environmental cleanup	(1)	(1)	27.7	(1)	(1)	28.1	(1)	(1)	28.
Keep up with political affairs	57.8	52.8	37.4	59.9	55.5	40.9	57.4	53.4	38.
Develop a philosophy of life	(1)	75.6	60.8	(1)	78.5	65.0	(1)	76.7	62.
Marry within next 5 years	(1)	29.1	(1)	(1)	28.0	(1)	(1)	28.9	(1)
Become an outstanding athlete	13.6	(1)	(1)	14.1	(1)	(1)	14.8	(1)	(1)

See footnotes at end of table.

APPENDIX TABLE 10.—Objectives Considered To Be Essential or Very Important. Weighted National Norms in Percentages for All First-Time, Full-Time Freshmen at Institutions of Higher Education, by Control and Affiliation, Fall 1966, Fall 1970, and Fall 1976—Continued

Objectives considered to be essential or very important	4-year colleges								
	Private nonsectarian			Protestant			Catholic		
	1966	1970	1976	1966	1970	1976	1966	1970	1976
Be active in a performing art	13.7	17.4	14.6	13.2	15.0	14.1	11.7	13.9	12.5
Be an authority in my field	68.8	68.7	71.2	66.4	66.2	69.2	67.0	67.9	71.2
Obtain recognition from colleagues	45.2	39.3	46.7	40.7	37.3	41.5	39.9	39.7	48.1
Influence political structure	(1)	23.8	18.6	(1)	18.1	16.1	(1)	22.6	18.5
Influence social values	(1)	39.9	35.0	(1)	37.6	36.1	(1)	42.0	34.6
Raise a family	(1)	66.6	57.9	(1)	69.3	62.0	(1)	67.4	60.9
Have administrative responsibility	27.3	17.1	28.7	26.0	18.7	28.3	28.0	20.3	32.7
Be an expert in finance	12.9	11.9	(1)	11.6	14.3	(1)	10.5	14.1	(1)
Be very well off financially	43.8	31.9	46.4	34.5	30.9	41.5	34.4	32.3	49.0
Perform or compose music	8.6	(1)	(1)	11.0	(1)	(1)	7.2	(1)	(1)
Help others in difficulty	70.7	70.6	66.6	74.3	70.8	70.9	80.4	73.6	71.9
Have active social life	(1)	50.6	(1)	(1)	54.7	(1)	(1)	57.9	(1)
Have friends different from me	(1)	65.1	(1)	(1)	63.5	(1)	(1)	67.9	(1)
Participate in Peace Corps/VISTA	25.3	24.8	(1)	26.3	23.5	(1)	34.6	27.8	(1)
Contribute to scientific theory	15.6	10.9	15.4	10.9	8.3	11.5	11.1	8.5	13.3
Become a community leader	29.6	17.7	(1)	28.2	17.7	(1)	28.9	18.2	(1)
Participate in community action	(1)	34.9	33.2	(1)	33.2	34.5	(1)	35.8	34.6
Write original works	20.4	20.4	15.7	15.8	15.0	13.9	18.9	15.4	14.0
Creating artistic works	16.8	21.2	16.2	15.2	16.6	13.9	17.4	16.7	13.0
Be successful in my own business	48.3	38.2	44.3	48.1	41.5	41.9	46.3	42.0	42.5
Not be obligated to people	28.8	22.0	(1)	24.6	20.4	(1)	26.1	18.4	(1)
Be involved in environmental cleanup	(1)	(1)	30.0	(1)	(1)	26.4	(1)	(1)	25.9
Keep up with political affairs	62.2	59.3	45.6	60.1	54.2	40.8	65.5	59.8	45.3
Develop a philosophy of life	(1)	81.5	68.6	(1)	79.9	67.7	(1)	83.3	68.5
Marry within next 5 years	(1)	25.0	(1)	(1)	31.7	(1)	(1)	24.0	(1)
Become an outstanding athlete	15.9	(1)	(1)	13.1	(1)	(1)	9.5	(1)	(1)

1 Category not included in questionnaire for indicated year.

SOURCE: Alexander Astin, *et al.*, *The American Freshman: National Norms for Fall 1966, 1970, 1976* (3 publications).

APPENDIX TABLE 11.—Current Fund Revenues of Institutions of Higher Education, by Control. United States, 1965–66 to 1973–74

[Amounts in thousands of dollars]

Type of revenue	1965–66		1970–71		1973–74	
	Public	Private	Public	Private	Public	Private
Total current fund revenue	7,397,672	5,398,534	15,526,885	8,352,303	21,206,491	10,505,962
Total educational and general	6,047,297	4,292,867	12,341,136	6,050,911	17,043,415	7,584,428
Student tuition and fees	854,458	1,825,147	2,032,329	2,988,882	2,734,731	3,765,377
Federal Government	1,368,194	1,295,779	1,815,495	1,009,131	2,362,244	1,157,290
State government	2,926,794	85,209	6,386,800	116,013	8,961,907	220,281
Local government	310,600	7,428	845,634	61,641	1,195,917	67,228
Endowment income	29,949	286,344	55,494	415,161	76,938	499,977
Private gifts and grants	156,358	486,340	295,356	796,299	430,706	1,000,276
Other educational and general [1]	400,944	306,620	910,027	663,786	1,280,972	873,999
Auxiliary enterprises	1,210,202	932,438	1,890,128	1,235,110	2,324,376	1,409,853
Student aid grants [2]	140,173	173,230	391,179	317,921	493,920	388,665
Major service programs [3]	N/A	N/A	904,441	748,361	1,344,780	1,123,015

N/A—Not available.

[1] In 1970–71 and 1973–74 the Category Other Educational and General includes revenues for recovery of indirect costs as follows: 1970–71, public $197.5; private $186.4: 1973–74 public $270.1; private $248.4.

[2] Includes Federal, State, local government, and private grants specifically designated for student aid.

[3] Included in Other Educational and General.

NOTE: Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, *Digest of Education Statistics, 1969, 1973, 1976.*

APPENDIX TABLE 12.—Current Fund Expenditures of Institutions of Higher Education, by Control. United States, 1965–66 to 1973–74

[Amounts in thousands of dollars]

Type of expenditures	1965–66		1970–71		1973–74	
	Public	Private	Public	Private	Public	Private
Total current fund expenditure	7,114,702	5,455,240	14,996,042	8,379,155	20,336,284	10,377,297
Educational and general expenditure	5,795,253	4,208,743	11,745,502	5,870,942	16,076,536	7,180,825
General administration and general expense	614,439	645,498	1,781,838	1,202,073	2,648,526	1,552,429
Instruction and departmental research	2,376,491	1,404,219	5,477,185	2,327,225	7,374,113	2,845,005
Extension and public service	396,461	46,256	542,543	45,848	662,289	68,272
Libraries	201,253	146,392	463,481	252,731	634,450	304,573
Plant operation and maintenance	491,855	355,960	1,187,256	593,409	1,717,121	776,936
Sponsored programs other than research	104,413	54,733	608,812	281,695	921,553	433,474
Sponsored research and other separately budgeted research	1,149,643	1,303,339	1,320,759	888,578	1,581,043	899,408
Related organized activities	350,280	209,191	413,628	279,382	537,440	300,730
All other educational and general expenditures	110,417	43,157	(1)	(1)	(1)	(1)
Auxiliary enterprises	1,044,079	847,006	1,781,372	1,207,036	2,207,882	1,405,374
Student-aid grants	156,440	272,786	528,243	569,955	705,691	690,797
Major public service programs	(2)	(2)	940,926	731,222	1,346,176	1,100,300
Current funds expended for capital outlay which were not reported in items above	118,931	126,704	(437,958)[3]	(164,499)[3]	(571,913)[3]	(209,070)[3]

[1] Data not collected separately.
[2] Included in Other Educational and General.
[3] In 1965–66 this figure was not distributed throughout the individual categories and is included in the total. In 1970–71 and 1973–74 capital outlay is distributed by category and is included in the total.

NOTE: Because of rounding, details may not add to totals.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics. *Digest of Education Statistics, 1969, 1973, 1976.*

APPENDIX TABLE 13.—Current Fund Revenues of Private Liberal Arts I and II Institutions, by Classification. United States, 1971–72 to 1973–74

[Amounts in thousands of dollars]

	1971–72		1972–73		1973–74	
	Liberal Arts I	Liberal Arts II	Liberal Arts I	Liberal Arts II	Liberal Arts I	Liberal Arts II
Total current fund revenues	803,216	1,359,126	848,953	1,425,308	920,104	1,514,608
Total educational and general	572,381	969,736	614,368	1,024,860	676,792	1,098,525
Tuition and fees	394,969	658,900	419,369	680,121	452,686	712,803
Federal Government	18,306	59,346	19,661	68,461	20,541	79,323
State government	3,864	5,297	4,148	6,141	7,268	9,485
Local government	55	488	574	401	736	1,094
Endowment income	65,137	30,872	68,258	33,752	78,251	37,251
Private gifts and grants	66,744	178,568	76,189	187,461	85,217	205,677
Other educational and general	23,306	36,265	26,170	48,524	32,093	52,892
Auxiliary enterprises	189,598	317,465	191,984	323,428	198,676	331,988
Student-aid grants	40,623	71,756	42,010	76,963	44,086	83,841
Major service programs	614	169	590	57	551	253

NOTE: Due to rounding, details may not add to totals.

SOURCE: EDSTAT System: HEGIS Tapes, 1972, 1973, 1974.

APPENDIX TABLE 14.—Current Fund Expenditures of Private Liberal Arts I and II Institutions, by Classification United States, 1971–72 to 1973–74

[Amounts in thousands of dollars]

	1971–72		1972–73		1973–74	
	Liberal Arts I	Liberal Arts II	Liberal Arts I	Liberal Arts II	Liberal Arts I	Liberal Arts II
Total current fund expenditures	802,575	1,340,246	842,471	1,406,445	907,030	1,505,949
Total educational and general	542,199	925,953	571,770	971,223	623,875	1,045,348
Instruction and departmental research	246,409	407,169	260,432	421,745	285,230	447,654
Extension and public service	3,300	5,639	3,125	5,459	3,673	5,841
Libraries	27,927	46,882	29,760	48,158	32,537	50,423
Plant operation and maintenance	72,361	117,471	76,396	127,484	83,463	137,250
Sponsored research and other separately budgeted research	10,660	5,840	9,361	6,709	9,397	6,805
Other sponsored programs	11,454	27,687	11,673	29,149	12,084	36,786
Organized activities related to educational departments	6,888	15,581	9,417	13,981	8,893	17,253
Other services programs	163,201	299,684	171,607	318,539	188,599	343,337
Auxiliary enterprises	185,908	292,906	190,236	301,750	200,126	314,722
Student aid grants	73,835	121,059	79,915	133,284	82,558	145,544
Major service programs	633	328	551	188	471	335

NOTE: Due to rounding, details may not add to totals.

SOURCE: EDSTAT SYSTEM: HEGIS Tapes, 1972, 1973, 1974.

APPENDIX TABLE 15.—Higher Education Price Index and Consumer Price Index: United States, Fiscal Years 1966 to 1976

Fiscal year	Higher education price index	Consumer price index
1966	95.0	97.1
1967	100.0	100.0
1968	106.0	103.3
1969	113.2	108.3
1970	121.0	114.7
1971	128.6	120.7
1972	135.8	125.1
1973	143.0	130.0
1974	153.1	141.6
1975	166.2	157.4
1976	177.2	168.5

SOURCES: D. Kent Halstead, Bureau of Labor Statistics, *Higher Education Prices and Price Indexes; Supplements 1975 and 1976.*

APPENDIX TABLE 16.—Student-Aid Revenue Sources and Expenditures for Institutions of Higher Education, by Control: United States, 1965–66 to 1973–

[Dollar amounts in thousands]

Source	1965–66[1]				1970–71				1971–72	
	Public		Private		Public		Private		Public	
	Dollar	Percent	Dollar	Percent	Dollar	Percent	Dollar	Percent	Dollar	Percent
Total student-aid grant income	140,173	100.0	173,230	100.0	391,179	100.0	317,921	100.0	415,377	100
Federal Government	53,499	38.2	35,652	20.6	236,154	60.4	137,220	43.2	238,554	57
State government	26,955	19.2	3,957	2.3	65,482	16.7	26,484	8.3	83,909	20
Local government	100	0.1	266	0.2	2,480	0.6	374	0.1	2,892	0
Private gifts and grants	30,791	22.0	55,814	32.2	63,157	16.2	71,798	22.6	69,936	16
Endowment income	7,293	5.2	30,315	17.5	13,975	3.6	58,275	18.2	11,170	2
Tuition and fees, room, board, and all other charges to individual users of services	18,680	13.3	34,504	19.9	N/A		N/A		N/A	
Other student-aid grants	2,856	2.0	12,722	7.3	9,932	2.5	23,771	7.5	8,916	2
Total expenditures for student aid	156,440		272,786		528,243		569,955		621,387	

See footnotes at end of table.

APPENDIX TABLE 16.—Student-Aid Revenue Sources and Expenditures for Institutions of Higher Education, by Control. United States, 1965–66 to 1973–74—Continued

[Dollar amounts in thousands]

Source	1971–72		1972–73				1973–74			
	Private		Public		Private		Public		Private	
	Dollar	Percent	Dollar	Percent	Dollar	Percent	Dollar	Percent	Dollar	Percent
Total student-aid grant income	349,214	100.0	431,662	100.0	368,414	100.0	493,920	100.0	388,665	100.0
Federal Government	143,512	41.1	235,197	54.5	145,785	39.6	290,129	58.7	151,754	39.0
State government	32,357	9.3	96,169	22.3	41,840	11.4	105,503	21.4	49,475	12.7
Local government	694	0.2	4,551	1.1	575	0.2	3,707	0.8	931	0.2
Private gifts and grants	78,076	22.4	74,835	17.3	83,275	22.6	71,933	14.6	80,789	20.8
Endowment income	68,972	19.8	11,874	2.6	74,593	20.2	12,300	2.5	78,373	20.2
Tuition and fees, room, board, and all other charges to individual users of services	N/A		N/A		N/A		N/A		N/A	
Other student-aid grants	25,602	7.3	9,036	2.1	22,346	6.1	10,347	2.1	27,342	7.0
Total expenditures for student aid	619,986		656,054		666,357		705,691		690,797	

1 1965–66 is for Aggregate U.S. (50 States, D.C., U.S. Service Schools Separately grouped, and outlying areas).

NOTE: Due to rounding, details may not add to totals.

SOURCES: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, *Financial Statistics of Higher Education. Student Financial Aid, 1965–66; Financial Statistics of Higher Education. Current Fund Revenues and Expenditures, 1970–71, 1971–72, 1972–73, 1973–74.*

APPENDIX TABLE 17.—Student-Aid Revenue Sources and Expenditures for Liberal Arts I and II Institutions, by Classification: United States, 1971–72 to 1973–74

[Dollar amounts in thousands]

Source	1971–72				1972–73				1973–74			
	Liberal arts I		Liberal arts II		Liberal arts I		Liberal arts II		Liberal arts I		Liberal arts II	
	Dollars	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent
Total student-aid grant income	40,623	100.0	71,756	100.0	42,010	100.0	76,963	100.0	44,086	100.0	83,841	100.0
Federal Government	8,621	21.2	36,508	50.9	8,880	21.1	40,322	52.4	9,622	21.8	39,835	47.5
State government	4,426	10.9	11,582	16.1	4,422	10.5	12,880	16.7	4,646	10.5	17,552	20.9
Local government	153	0.4	90	0.1	92	0.2	14	0.0	308	0.7	71	0.1
Private gifts and grants	10,949	27.0	14,608	20.4	10,442	24.9	15,720	20.4	10,600	24.0	16,835	20.1
Endowment income	14,546	35.8	4,310	6.0	15,899	37.8	4,525	5.9	16,862	38.2	5,803	6.9
Other student-aid grants	1,927	4.7	4,658	6.5	2,275	5.4	3,502	4.6	2,048	4.6	3,745	4.5
Total expenditures for student aid	73,835		121,059		79,915		133,284		82,558		145,544	

NOTE: Due to rounding, details may not add to totals.

SOURCE: EDSTAT System: HEGIS Tapes, 1972, 1973, 1974.